pdp11

PDP-11/05
engineering drawings

AIS.SKI8835.

digital

Scanned by Steve Malikoff steven@malikoff.com March 2023

PDP-11/05
engineering drawings

digital equipment corporation · maynard. massachusetts

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

DRAWING DIRECTORY

"THIS DRAWING AND SPECIFICATIONS, HERETH, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © , DIGITAL EQUIPMENT CORPORATION"

CUSTOMER PRINT SET INDEX

THIS IS PRINT SET

SEQUENCE		SEQUENCE
16 BIT COMPUTER (11/05)	B-DD-11/Ø5-Ø	
16 BIT COMPUTER (11/05)	D-UA-11/Ø5-Ø	
16 BIT COMPUTER (11/05)	C-PL-11/Ø5-Ø	
MODULE UTILIZATION (16K)	D-MU-11/Ø5-Ø-Ø2	
MODULE UTILIZATION (8K)	D-MU-11/Ø5-Ø-Ø1	
MODULE UTILIZATION (10½)	D-MU-11/Ø5-Ø-Ø7	
CENTRAL PROCESSOR	B-DD-KD11-B	
16 BIT 18MIL MEMORY	B-DD-MM11-L	
BUS TERMINATOR	D-CS-M93Ø-Ø-1	
CONSOLE ASSY	B-DD-KY11-J	
H75Ø POWER SUPPLY	B-DD-H75Ø-Ø	
LINE SET BCØ5-H	B-DD-BC05H-Ø	
LINE SET BCØ5-T	B-DD-BC05T-Ø	
LINE SET BCØ5-U	B-DD-BC05U-Ø	
INPUT HARNESS (A.C.)	E-IA-7008713-0-0	
HARNESS (D.C.)	D-IA-7008856-0-0	
BA11-D POWER TO DISTRIBUTION BOARD	E-IA-7009208-0-0	
HEADER CABLE ASSY	D-IA-7008820-0-0	
CIRCUIT SCHEMATIC	C-CS-5409949-0-1	
BERG TO BACKPLANE	C-CS-M9970-0-1	
CABLE ASSY (KL8E)	D-IA-7008360-0-0	
MAINTENANCE BOARD	D-BS-KM11-Ø-MB	
MAINT. MODULE OVERLAY (11/05-KM1)	A-SS-5509081-0-9	
MAIN. MODULE OVERLAY (11/05-KM2)	A-SS-5509081-0-10	
CIRCUIT SCHEMATIC (8K)	C-CS-5409818-0-1	
*ETCH/WIRE LIST (8K)	K-WL-7008843-1-1	
CIRCUIT SCHEMATIC (16K)	C-CS-5410035-0-1	
*ETCH/WIRE LIST (16K)	K-WL-7008843-2-1	
CIRCUIT SCHEMATIC (10½)	D-CS-5410329-0-1	
*ETCH/WIRE LIST (10½)	K-WL-11Ø5-Ø-8	
1105 ACCESSORY LIST	A-AL-11Ø5-Ø-Ø4	
1105 SOFTWARE LIST	A-SL-11Ø5-Ø-Ø5	
* 1105 ACCEPTANCE PROC.	A-SP-11Ø5-Ø-6	
*DECAL (10.5"box)	A-DC-7411305-0-0	

* ONLY INCLUDED IN MANUFACTURING PRINT SET.

UNIT VARIATIONS

VAR	TITLE	PRINT SET 11Ø5-Ø
	CONFIGURATION #1	
11Ø5-HA	KD11-B, MM11-K, 115V/60HZ	
11Ø5-HB	KD11-B, MM11-K, 230V/50HZ	
11Ø5-JA	KD11-B, MM11-L, 115V/60HZ	
11Ø5-JB	KD11-B, MM11-L, 230V/50HZ	X
	CONFIGURATION #2	
11Ø5-KA	KD11-B, MM11-K, 115V/60HZ	X
11Ø5-KB	KD11-B, MM11-K, 230V/50HZ	X
11Ø5-LA	KD11-B, MM11-L, 115V/60HZ	X
11Ø5-LB	KD11-B, MM11-L, 230V/50HZ	X
	CONFIGURATION #3	
11Ø5-MA	KD11-B, MM11-K, 115V/60HZ	X
11Ø5-MB	KD11-B, MM11-K, 230V/50HZ	X
11Ø5-PA	KD11-B, MM11-L, 115V/60HZ	X
11Ø5-PB	KD11-B, MM11-L, 230V/50HZ	X
	CONFIGURATION #4	
11Ø5-NC	KD11-B, MM11-L 115V/60HZ	X
11Ø5-ND	KD11-B, MM11-L, 230V/50HZ	X

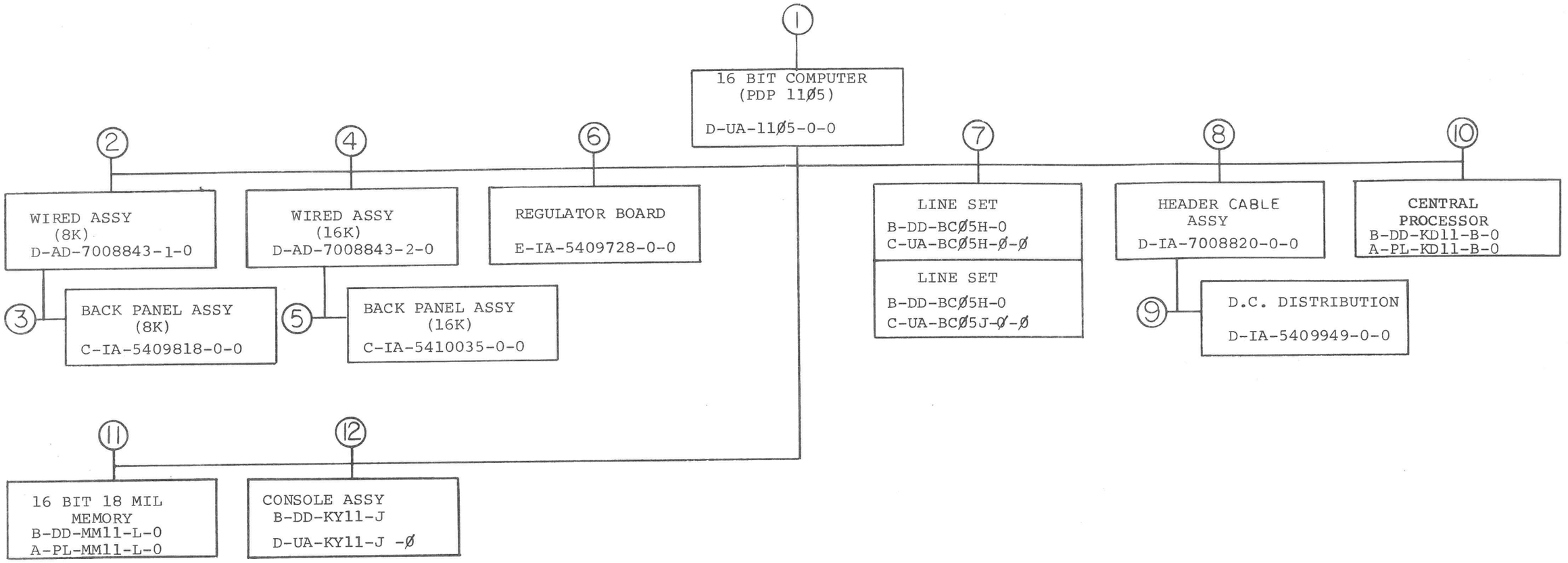
REVISIONS	REV	CHG. NO.	DATE
	P	REVISED & REDRAWN 11/05-47	8-73
	R	11/05-48	9-73
	S	11/05-49	10-73

DEC 1-9-(3251-1062-1-A-R972

DRB 106

USED ON OPTION/MODEL	
SHEET 1 OF 7	

DRN. J.CAHILL	DATE 4/19/2	TITLE: 16 BIT COMPUTER (PDP 11Ø5)
CHK'D. C.TESCHNER	DATE 4/19/2	
PROJ ENG. B.WEEKS	DATE 5/25/2	
PROD. R.PETERSON	DATE 5/25/2	SIZE B; CODE DD; NUMBER 11Ø5-Ø; REV (1)
FIELD SERV. D.DICKHUT	DATE 5/25/2	DIST



NOTE: This sheet for 5¼" only. See sheets 6 & 7 for 10½" chassis

TITLE		SIZE	CODE	NUMBER	REV
16 BIT COMPUTER (PDP 11Ø5)	SHEET 2 OF 7	B	DD	11Ø5-Ø	S

DRB 107
DEC 16-(325)-1062-3-N871

CUSTOMER PRINT SET Ø5-Ø	SET MFG.	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
			ELECTRICAL				
X	X	1	E-IA-7008713-Ø-Ø	#J	1	AC INPUT HARNESS	✓
X	X		E-IA-7008856-Ø-Ø	#	1	HARNESS (D.C.)	✓
X	X		A-AL-11Ø5-Ø-Ø4	A	1	11Ø5 ACCESSORY LIST	✓
X	X		A-SL-11Ø5-Ø-Ø5	*	1	11Ø5 SOFTWARE LIST	✓
X	X		D-MU-11Ø5-Ø-Ø1	*	1	MODULE UTILIZATION (8K) 16K	✓
X	X		D-MU-11Ø5-Ø-Ø2	*	1	MODULE UTILIZATION (16K) 8K	✓
	X		A-SP-11Ø5-Ø-6		23	11Ø5 ACCEPTANCE PROCEDURE	
X	X		D-IA-7008360-0-0	B#	1	CABLE ASSY (KL8E)	✓
X	X		D-BS-KM11-Ø-MB	#	3	MAINTENANCE BOARD	✓
X	X		A-SS-5509081-0-9	#	1	MAINT. MODULE OVERLAY (11/Ø5-KM1)	✓
X	X		A-SS-5509081-0-10	#	1	MAINT. MODULE OVERLAY (11/Ø5-KM2)	✓
X	X		D-CS-M930-0-1	C	1	BUS TERMINATOR	✓
		2	D-AD-7008843-1-0	#	1	WIRED ASSY (8K)	
	X		K-WL-7008843-1-1	#	1	ETCH/WIRE LIST	
		3	C-IA-5409818-0-0	#	1	BACK PANEL ASSY (8K)	
X	X		C-CS-5409818-0-1	#H	2	CIRCUIT SCHEMATIC (8K)	✓
		4	D-AD-7008843-2-Ø	#	1	WIRED ASSY (16K)	
	X		K-WL-7008843-2-1	#	1	ETCH/WIRE LIST (16K)	
		5	C-IA-5410035-0-0	#	1	BACK PANEL ASSY (16K)	
X	X		C-CS-5410035-0-1	#J	2	CIRCUIT SCHEMATIC (16K)	✓
		6	E-IA-5409728-Ø-Ø	#	1	REGULATOR BOARD	
			D-CS-5409728-0-1	#	1	CIRCUIT SCHEMATIC	
			B-MH-5409728-0-6	#	1	MODULE E.C.O. HISTORY	

CUSTOMER PRINT SET 11Ø5-Ø	SET MFG.	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
			ELECTRICAL				
C	C	7	B-DD-BCØ5H-0	#	3	LINE SET	✓
			C-UA-BCØ5H-0-0	#	1	LINE SET BCØ5H (115V)	
			C-UA-BCØ5J-0-0	#	1	LINE SET BCØ5J (230V)	
X	X	8	D-IA-7008820-0-0	#	1	HEADER CABLE ASSY	✓
		9	D-IA-5409949-0-0	#	1	D.C. DISTRIBUTION	
X	X		C-CS-5409949-0-1	#	1	CIRCUIT SCHEMATIC	✓
			B-MH-5409949-0-6	#	1	MODULE E.C.O. HISTORY	
C	C	10	B-DD-KD11-B	#	13	CENTRAL PROCESSOR	✓
			A-PL-KD11-B-0-0	#	1	CENTRAL PROCESSOR (PL)	
C	C	11	B-DD-MM11-L	#	3	16 BIT 18 MIL MEMORY	✓
			A-PL-MM11-L-0-0	#	1	16 BIT 18 MIL MEMORY (PL)	
		12	B-DD-KY11-J		3	DRAWING DIRECTORY (KY11-J)	
			D-UA-KY11-J-Ø		1	CONSOLE ASSY (PDP 11Ø5)	
			A-PL-KY11-J-Ø		1	CONSOLE ASSY (PDP 11Ø5) PL.	

CUSTOMER PRINT SET CODES

X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

TITLE	SHEET	SIZE	CODE	NUMBER	REV
16 BIT COMPUTER (PDP 11Ø5)	3 OF 7	B	DD	11Ø5-Ø	S

DRB 108
DEC 16-(325)-1062-2B-R972

CUSTOMER PRINT SET 11Ø5-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
X	X	1	D-UA-11Ø5-Ø-Ø	M	6	16 BIT (PDP 11Ø5) ASSY	
X	X		C-PL-11Ø5-Ø-Ø	M	3	16 BIT (PDP 11Ø5) ASSY (P.L.)	
			E-IA-7409458-0-0	#	4	CHASSIS	
			D-IA-7409453-0-0	#	1	FAN MOUNTING PLATE	
			A-DC-5309413-0-0	#	1	SPECIAL DECAL (UL)	
			C-IA-7411235-0-0	#	1	FILLER STRIP ASSY	
			C-IA-7410777-0-0	#	1	RET CONN BLOCK (L.H.)	
			C-IA-7410778-0-0	#	1	RET CONN BLICK (R.H.)	
			D-IA-7409459-0-0	#	1	BRKT CHASSIS SLIDE (L.H.)	
			D-IA-7409533-0-0	#	1	COVER SIDE	
			C-MD-7409460-0-0	#	1	COVER TOP	
			C-IA-7409449-0-0	#	1	BRKT CHASSIS SLIDE (R.H.)	
			C-MD-7409591-0-0	#	1	CLAMP	
			C-PS-1210698-0-0	#	1	GUIDE CARD CENTER	
			D-PS-1210931-0-0	#	1	BLOCK CABLE RETAINER	
			D-MD-7409432-0-0	#	1	PLATE LOWER RETAINER	
			C-MD-7409430-0-0	#	1	NUT SWIVEL	
			C-MD-7409479-0-0	#	1	PLATE PRESSURE	
			D-IA-7008856-0-0	#	1	HARNESS DC	
			E-IA-7008713-0-0	#	1	AC INPUT HARNESS	
			A-AL-11Ø5-Ø-Ø4	#	1	11Ø5 ACCESSORY LIST	
			A-SL-11Ø5-Ø-Ø5	#	1	11Ø5 SOFTWARE LIST	
			A-PI-3700061-0-0	#	2	PACKAGING INSTRUCTION	
			B-MD-7409817-0-0	#	1	PLATE CABLE CLAMP	
			B-MD-7409816-0-0	#	1	SHIPPING BRACKET	
			C-MD-7409818-0-0	#	1	BRACKET CABLE CLAMP	
			B-IA-7409729-0-0	#	1	JUMPER POWER	
			D-PS-1210945-0-0	#	4	SLIDES	
			B-IA-7409903-0-0	#	1	JUMPER POWER	
			D-IA-7409533-1-0	#	1	COVER SIDE	
			E-IA-5309816-0-0	#	1	CHASSIS POWER SUPPLY	
			D-IA-7008726-0-0	#	1	TRANSFORMER ASSY	
			A-DC-5309414-0-0	#	1	SPECIAL DECAL (UL)	
			D-PS-1211381-0-0	#	1	AIR BAFFLE	
		2	D-AD-7008843-1-0	#	1	WIRED ASSY (8K)	

CUSTOMER PRINT SET 11Ø5-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		3	C-IA-5409818-0-0	#	1	BACK PANEL ASSY (8K)	
			D-AH-5409818-0-5	#	1	ASSY/DRILLING HOLE	
			K-CO-5409818-0-4	#	1	X-Y CO-ORDINATE HOLE LOCATION	
			E-PS-1210258-0-0	#	1	288 PIN CONN (H863)	
			D-PS-1210834-0-0	#	1	360 PIN CONN	
			C-PS-1210932-0-0	#	1	CONNECTOR GUIDE	
			E-PS-1210991-0-0	#	1	11Ø5 LOGIC FRAME	
		4	D-AD-7008843-2-0	#	1	WIRED ASSY (16K)	
			D-MD-5010051-0-0	#	1	SHEET PROTECTION	
		5	C-IA-5410035-0-0	#	1	BACK PANEL ASSY (16K)	
			D-PS-1210834-0-0	#	1	360 PIN CONN BLOCK	
			E-PS-1210258-0-0	#	1	288 PIN CONN (H863)	
			D-AH-5410035-0-5	#	1	ASSY/DRILLING HOLE	
			K-CO-5410035-0-4	#	1	X-Y CO-ORDINATE HOLE LOCATION	
			C-PS-1210932-0-0	#	1	CONNECTOR GUIDE	
			E-PS-1210991-0-0	#	1	11Ø5 LOGIC FRAME	
		6	E-IA-7409728-0-0	#	1	REGULATOR BOARD	
			K-[illegible]9728-0-4	#	1	X-Y CO-ORDINATE HOLE LAYOUT	
			C[illegible]779-0-0	#	1	CONTACT COMMON CAPACITOR	
			C[illegible]9781-0-0	#	1	CONTACT CAPACITOR	
			C-IA-[illegible]10126-0-0	#	1	HOLDER CAPACITOR	
			D-PS-1210596-0-0	#	1	HEAT SINK	
		7	B-DD-BCØ5H-0	#	3	LINE SET	
			C-UA-BCØ5H-Ø-Ø	#	1	LINE SET BCØ5H (115)	
			C-UA-BCØ5J-Ø-Ø	#	1	LINE SET BCØ5J (230)	

MECHANICAL

CUSTOMER PRINT SET CODES
X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

TITLE: 16 BIT COMPUTER (PDP 11Ø5)

SHEET 4 OF 7 | SIZE B | CODE DD | NUMBER 11Ø5-Ø | REV S

DRB 108

DEC 16-(325)-1062-2B-R972

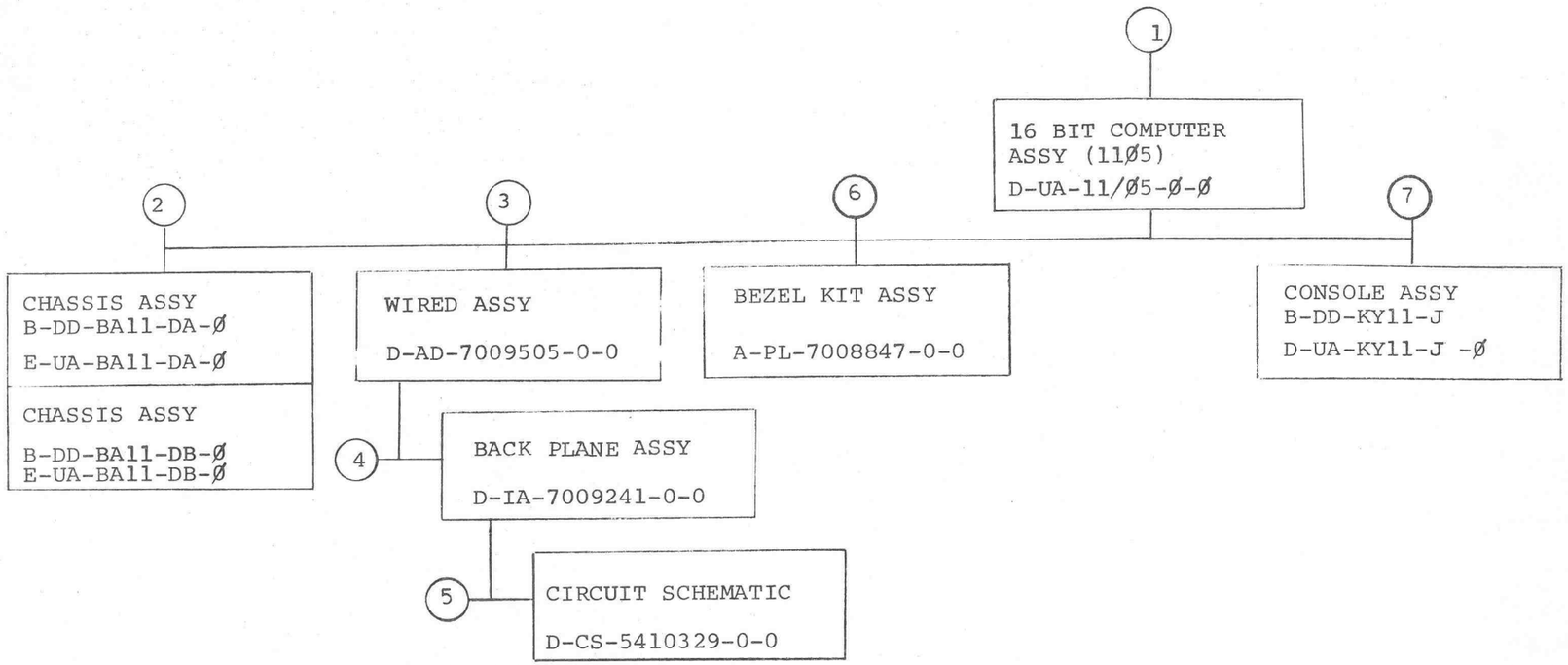
CUSTOMER PRINT SET 11Ø5-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
			MECHANICAL				
		8	D-IA-7008820-0-0	#	1	HEADER CABLE ASSY	
		9	D-IA-5409949-0-0	#	1	D.C. DISTRIBUTION	
			K-CO-5409949-0-4	#	1	X-Y CO-ORDINATE HOLE LOCATION	
			D-AH-5409949-0-5	#	1	ASSY/DRILLING HOLE LAYOUT	
		10	B-DD-KD11-B	#	1	CENTRAL PROCESSOR	
			A-PL-KD11-B-0-0	#	1	CENTRAL PROCESSOR (PL)	
		11	B-DD-MM11-L	#	3	16 BIT 18 MIL MEMORY	
			A-PL-MM11-L-0-0	#	1	16 BIT 18 MIL MEMORY (PL)	
C	C	12	B-DD-KY11-J		3	DRAWING DIRECTORY (KY11-J)	
			D-UA-KY11-J-Ø		1	CONSOLE ASSY (PDP 11Ø5)	
			A-PL-KY11-J-Ø		1	CONSOLE ASSY (PDP 11Ø5) P.L.	

CUSTOMER PRINT SET CODES	
	X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
	C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
	S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

TITLE		SIZE	CODE	NUMBER	REV
16 BIT COMPUTER	SHEET 5 OF 7	B	DD	11Ø5-Ø	S

DRB 108

DEC 16-(325)-1062-2B-R972



NOTE: SHEETS 6 & 7 ARE FOR 10.5 BOX ONLY.

TITLE		SIZE	CODE	NUMBER	REV
16 BIT COMPUTER (PDP1105)	SHEET 6 OF 7	B	DD	1105-P	S

ELECTRICAL

CUSTOMER PRINT SET 11Ø5-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		1	D-UA-11/Ø5-Ø-Ø		7	16 BIT COMPUTER ASSY (11Ø5)	
X	X		D-IA-7009360-0-0		1	CPU POWER HARNESS	
X	X		D-MU-11Ø5-Ø-Ø7		1	MODULE UTILIZATION (10.5)	
X	X		C-CS-M9970-0-1		1	BERG TO BACK PLANE	
		2	B-DD-BA11-D		2	DRAWING DIRECTORY (BA11-D)	
			E-UA-BA11-D-Ø		2	CHASSIS ASSY	
		3	D-AD-7009505-0-0		1	WIRED ASSY	
			C-PS-1210698-0-0		1	CARD GUIDE	
	X		K-WL-1105-0-8		1	ETCH/WIRE LIST (10½)	
		4	D-IA-7009241-0-0		1	BACK PLANE ASSY	
			5010328		1	ETCH CIRCUIT BOARD	
X	X	5	D-CS-5410329-Ø-1		1	CIRCUIT SCHEMATIC (11Ø5 10.5)	
			K-CO-5410329-Ø-4		1	X-Y COORDINATE HOLE LOCATION	
			E-AH-5410329-Ø-5		1	ASSY/DRILLING HOLE LAYOUT	
			B-MH-5410329-Ø-6		1	MODULE ECO HISTORY	
			5010328		1	ETCH CIRCUIT BOARD	

MECHANICAL

CUSTOMER PRINT SET 11Ø5-Ø	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		1	D-UA-11/Ø5-Ø-Ø		7	16 BIT COMPUTER ASSY (11Ø5)	
			D-IA-7009360-0-0		1	CPU POWER HARNESS	
			D-MD-7410664-0-0		1	CONSOLE MTG BRKT (10.5)	
			A-PI-370098-0-0			PACKAGEING INST.	
			B-IA-7409729-0-0		1	JUMPER POWER	
C	C		B-DD-H75Ø-Ø			H75Ø POWER SUPPLY	
C	C		B-DD-BC05-T			LINE SET BC05-T	
C	C		B-DD-BC05-U			LINE SET BC05-U	
X	X		E-IA-7009208-0-0		1	DISTRIBUTION BOARD HARNESS (BA11-D)	
	X		A-DC-7411305-0-0			DECAL (10.5" MODULE UTILIZATION)	
		2	B-DD-BA11-D		2	DRAWING DIRECTORY (BA11-D)	
			E-UA-BA11-D-Ø		2	CHASSIS ASSY	
		4	D-IA-7009241-0-0		1	BACK PLANE ASSY	
			5010328		1	ETCH CIRCUIT BOARD	
		5	D-CS-5410329-Ø-1		1	CIRCUIT SCHEMATIC (11Ø5 10.5)	
		6	A-PL-7008847-0-0		1	BEZEL KIT ASSY	
			D-IA-7409683-0-0		1	BEZEL	
			A-PS-1211221-0-0		1	STRIP MTG	
		7	B-DD-KY11-J		3	DRAWING DIRECTORY (KY11-J)	
			D-UA-KY11-J-Ø		1	CONSOLE ASSY (PDP11Ø5)	
			A-PL-KY11-J-Ø		1	CONSOLE ASSY (PDP11Ø5) PL	

CUSTOMER PRINT SET CODES

X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

TITLE: 16 BIT COMPUTER (PDP11Ø5)

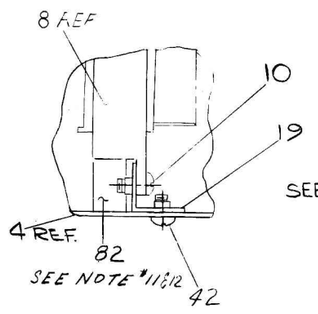
SHEET 7 OF 7

SIZE	CODE	NUMBER	REV
B	DD	11Ø5-Ø	S

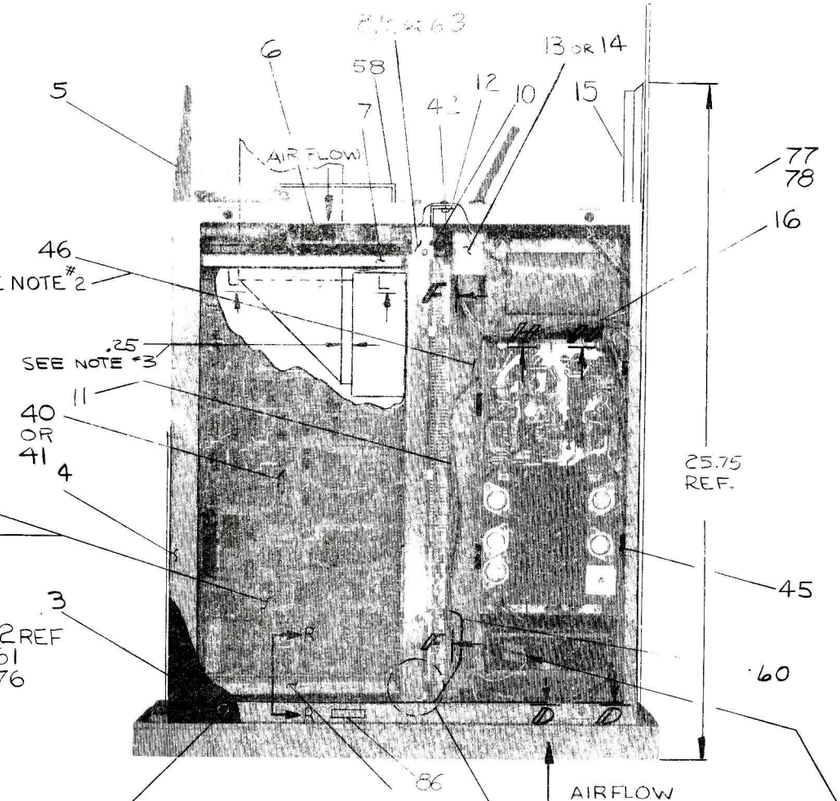
DRB 108

DEC 16-(325)-1062-2B-R972

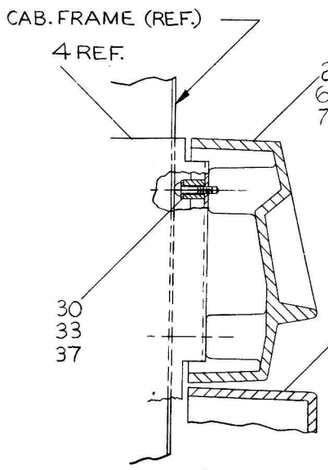
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission. 1972



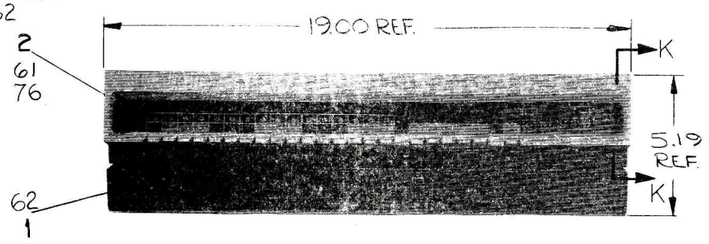
DETAIL-A



PLAN VIEW



SECTION K-K



FRONT VIEW

WIRE TABLE

PART NO.	COLOR	FROM HARNESS LEAD NO.	TO SYSTEM LOCATION	REMARKS
7008713	RED	J1	S1-2	VIEW E-E
	RED	J2	S1-1	
	VIO	J3	S1-6	
	BLK	J4	S1-5	
	RED	J12	H740 P.S. J3	THERMAL INTERLOCK
	RED	J11	H740 FAN	P.S. FAN TAB
	WHT	J10	H740 FAN	P.S. FAN TAB
		J6	P9	BACK OF CHASSIS
		J5	P8	BACK OF CHASSIS
		J9	TRANSFORMER P5	VIEW H-H
		P1	P.S. INPUT BOX J13	A.C. INPUT BOX
	RED	J7	11/05 FAN	CHASSIS FAN
7008713	WHT	J8	11/05 FAN	CHASSIS FAN
7008856		P1	H740 P.S. J2	P.S. MATE-N-LOCK
	VIO	8	BP-1	VIEW F-F
	RED	9	BP-3	
	YEL	10	BP-2	
	BLK	11	BP-4	
	BLU	12	BP-5	
	ORN	13	LOGIC POINT C01 P1	+15
	BRN	14	LOGIC POINT C01 P1	+5 C.D
	BLK	15	BP-6	VIEW F-F
7008856	RED	16	BP-7	
		TRANSFORMER P2	H740 P/S J1	VIEW H-H & POWER CARD TO TRANSFORMER
7409729-2	RED	B.P.-7	CONSOLE-+5	CONSOLE TO BACK PLANE & VIEW D-D
7409729-1	BLK	B.P.-6	CONSOLE-GND	CONSOLE TO BACK PLANE & VIEW D-D
7409903	BLK	B.P.-6	BACK PLANE-GND	BACK PLANE TO CHASSIS - DETAIL-A

THIS CONNECTION IS SHOWN 90° OUT OF POSITION FOR CLARITY.

1. INSTALLATION OF I/Ø CABLE, WHICH IS ALREADY CONNECTED TO ITEM #(2), CONSOLE ASSY, IS AS FOLLOWS. RUN I/Ø CABLE DOWN INNER SIDE OF ITEM #(18) CARD GUIDE ASSY SLIDE CABLE THROUGH OPENING ON BOTTOM OF ITEM #(18) CARD GUIDE ASSY, TO ONE OF THE THREE EXIT LOCATIONS FOR THE CABLE, AFTER EXIT LOCATION IS DECIDED, FOLD CABLE 90° AND HOLD IN PLACE BY USING ITEM # 35 (CLAMP) AND ITEM #46 (TAPE) AS SHOWN IN VIEW C-C.
2. USE TAPE (ITEM #46) TO HOLD HEADER CABLE ASSY TO CHASSIS.
3. FOLD CABLE 90° AS SHOWN TO INSURE CORRECT LOCATION IN CABLE CLAMP.
4. ITEM #65 (ELECTROMAGNETIC SHIELD) GOES BETWEEN CENTRAL PROCESSOR BOARDS & MEMORY BOARDS.
5. THE 6 PIN MATE-N-LOCK CONN (MALE) ON TRANSFORMER (ITEM #67) IS TO REMAIN ON FLOOR OF CHASSIS.
6. CONNECT 3 PIN-MATE-N LOCK CONN. (FEMALE) ON TRANSFORMER (ITEM #67) TO 3 PIN MATE-N-LOCK CONN. (MALE) ON REGULATOR BOARD (ITEM # 75) (SECTION P-P).
7. 2 PIN MATE-N-LOCK TO BE SECURED TO HEAT SINK FOR HANDLING.
8. ITEMS #79 & 80 (THREAD CUTTING SCREWS) MUST BE ASSEMBLED USING A TORQUE SCREW DRIVER. SCREWS WILL BE ATTACHED USING 8 INCH POUNDS OF TORQUE.
9. ADHERE FOAM (#9009542) TO TOP OF CARD GUIDE (#1211099)
10. ADHERE FOAM (9009544) TO INSIDE OF COVER (7409460)
11. ADHERE FOAM (9009543) TO END OF LOGIC FRAME
12. DO NOT ADD ITEM #82 TO VARIATIONS MA, MB, PA, PB.
13. INSTALL BAFFLE (1211381) IN UNUSED SLOTS ON RIGHT HAND CARD GUIDE (1211099)

REVISIONS			
CHK	CHANGE NO.	REV.	
[illegible]	11/05-00017	A	
[illegible]	11/05-00030	B	
M TITELBAUM	10-5-72		
[illegible]	11/05-00034	C	
[illegible]	11-20-72		
[illegible]	11/05-00035	D	
[illegible]	12-4-72		
[illegible]	11/05-00039	E	
[illegible]	1-8-73		
[illegible]	11/05-00041	H	
[illegible]	1-10-73		
[illegible]	11/05-00040	F	
[illegible]	1-19-73		
M TITELBAUM			
[illegible]	11/05-00047	L	
[illegible]	2-8-73		
[illegible]	11/05-00046	M	
[illegible]	3-6-73		

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP 11Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005	±0° 30'
.XX = .02	
.X = .1	

REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓

MATERIAL

FINISH

DRN	[illegible]	DATE 2-24-72
CHK'D	J. Teschner	DATE 7-19-72
ENG	Alan Lyons	DATE 8-15-72
PROJ ENG	[illegible]	DATE 5-16-72
PROD	[illegible]	DATE 7/4/73

NEXT HIGHER ASSY. B-DD-11Ø5-Ø

SCALE NONE

SHEET 1 OF 6

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: 16 BIT COMPUTER ASSY (PDP 11Ø5)

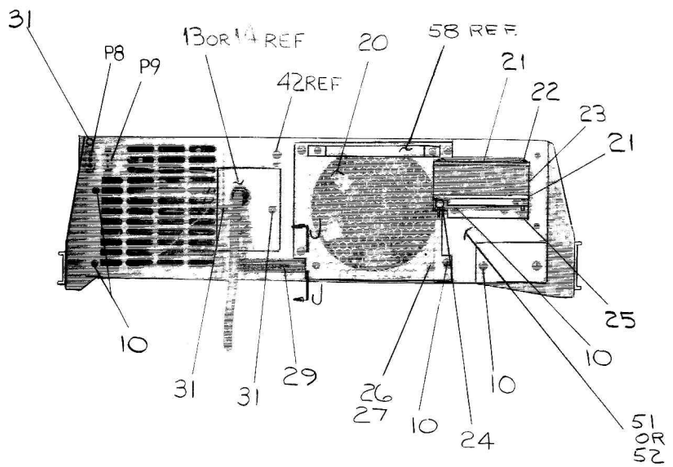
SIZE	CODE	NUMBER	REV.
D	UA	11Ø5-Ø-Ø	M

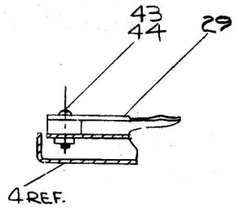
DIST.

DEC FORM NO. DRD 100-A

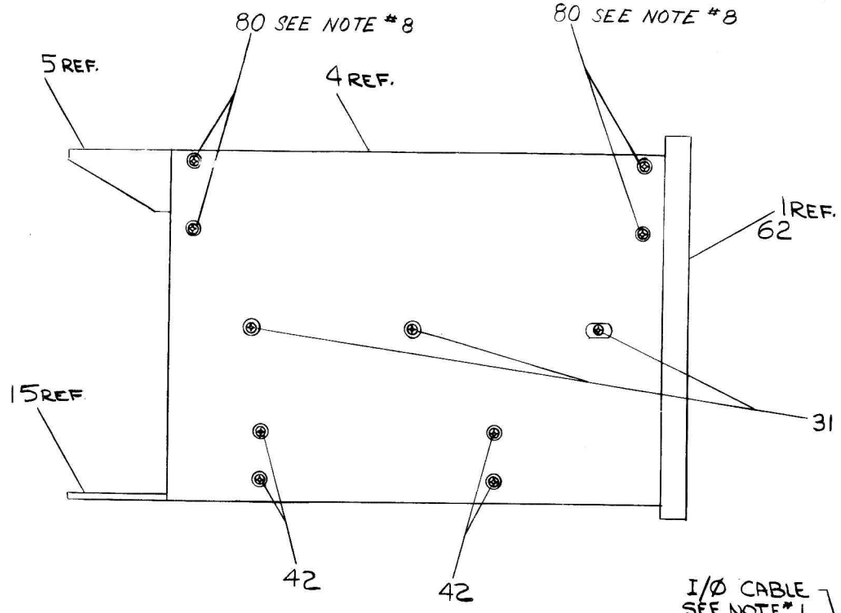
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or, copied or used in whole or in part as the basis for the manufacture or sale of items without written permission. ©72

REAR VIEW

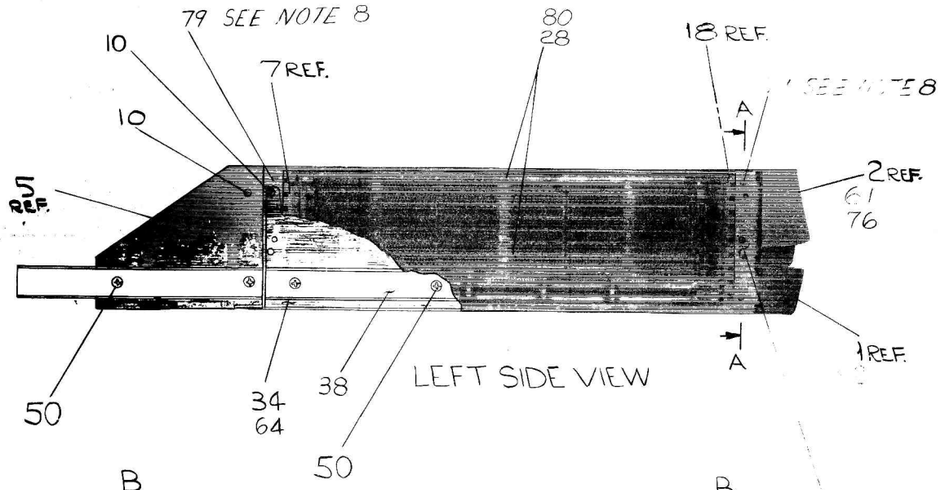




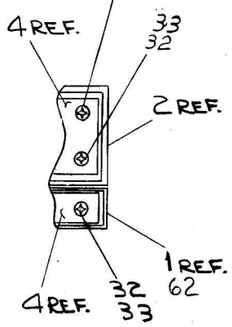
SECTION J-J



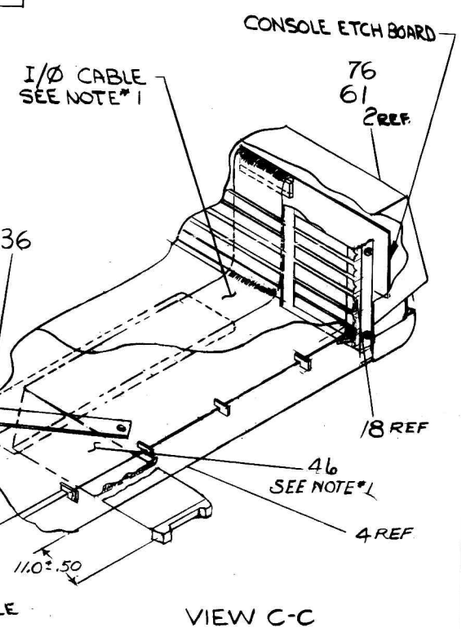
VIEW B-B



LEFT SIDE VIEW



VIEW A-A



VIEW C-C

SEE VIEW C-C

FIRST USED ON OPTION/MODEL: PDP 1105	QTY.	DESCRIPTION	PART NO.	ITEM NO.
		PARTS LIST		
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES: DECIMALS .XXX = .005, .XX = .02, .X = .1; ANGLES ±0° 30'. REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓				
MATERIAL: —				
FINISH: —				

DRN. — DATE 8-24-72
CHKD. C. Teschner DATE 4-14-72
ENG. William Lyons DATE 5-15-72
PROJ ENG. [illegible] DATE 5-16-72
PROD. [illegible] DATE 9/11/72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: 16 BIT COMPUTER ASSY (PDP1105)

NEXT HIGHER ASSY.: B-DD-1105-Ø

SCALE: NONE

SHEET 2 OF 6

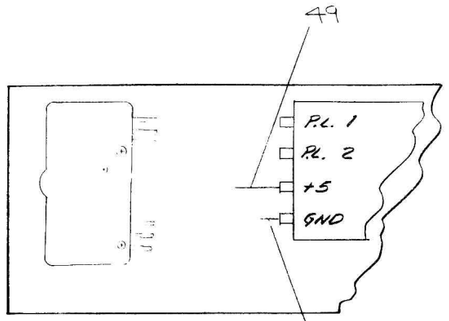
SIZE D | CODE UA | NUMBER 1105-Ø-Ø | REV. M

DIST.

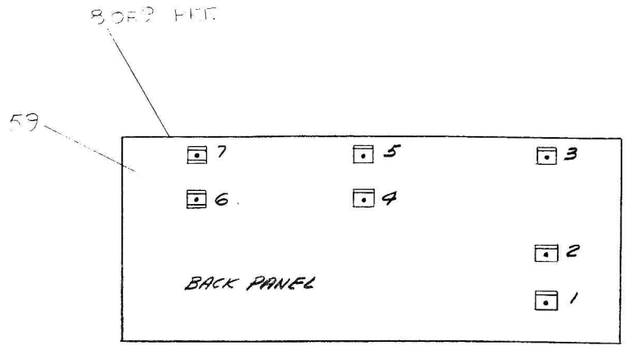
REVISIONS: REV. | CHANGE NO. | CHK

DEC FORM NO. DRD 100-A

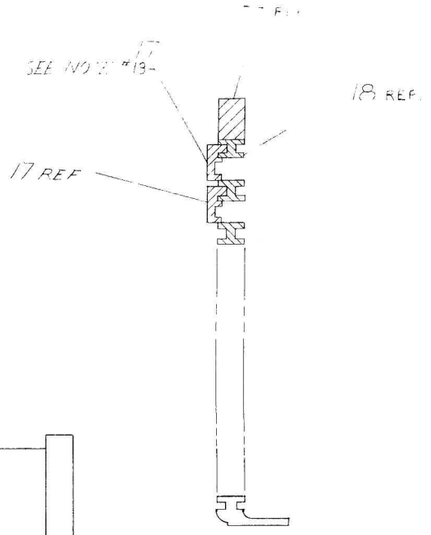
This drawing and specifications, herein are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



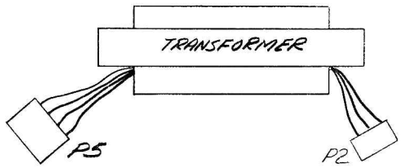
VIEW D-D
SCALE- NONE



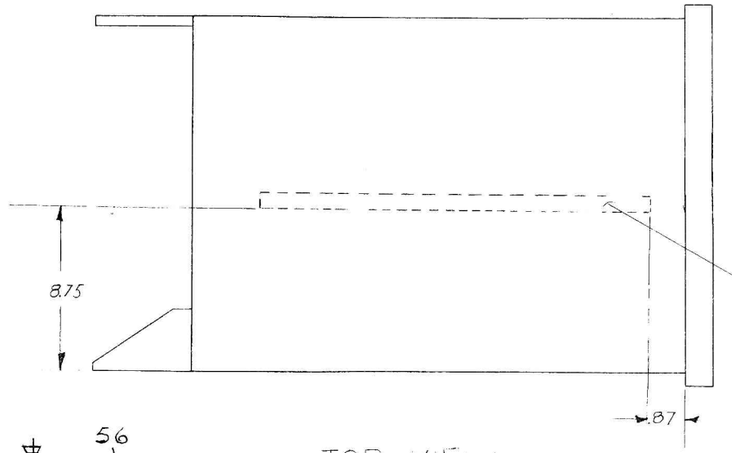
VIEW F-F
SCALE : NONE



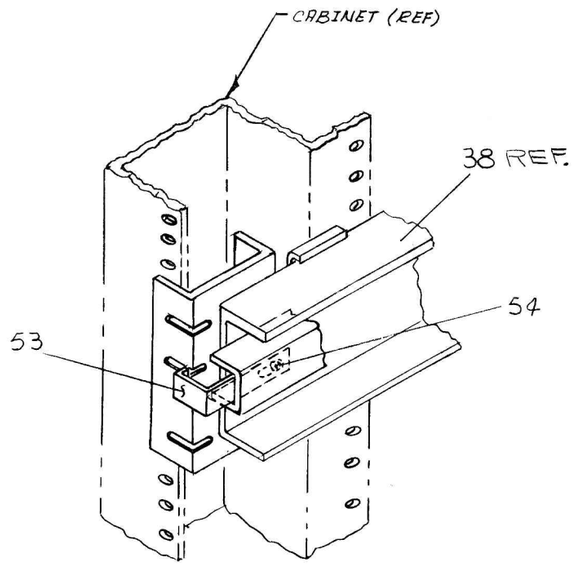
SECTION R-R



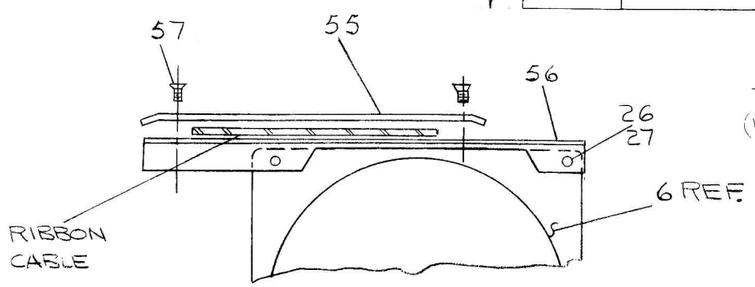
VIEW H-H
SCALE: NONE



TOP VIEW
(WITH TOP COVER)



LOCATION OF SHIPPING BRACKETS WHEN UNIT IS SUPPLIED IN CAB. (BOTH SIDES)



VIEW L-L
SCALE: NONE

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP1105		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: XXX = .005, XX = .02, X = .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN [signature] DATE 3-28-72
CHK'D C. Fleischer DATE 4-14-72
ENG. Chas. Lyons DATE 5-15-72
PROJ. ENG'D DATE
PROD. DATE
NEXT HIGHER ASSY B-DD-1105-0
SCALE
SHEET 3 OF

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE 16 BIT COMPUTER ASSY (PDP1105)

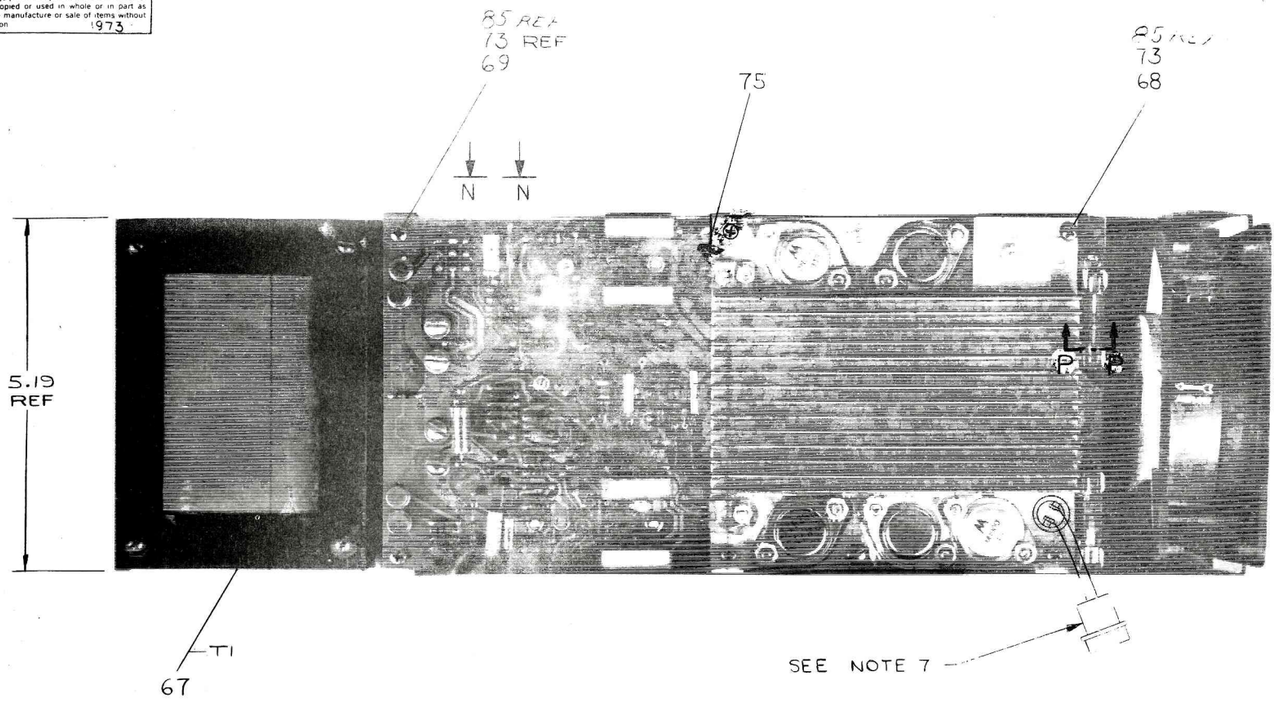
SIZE D | CODE DUA | NUMBER 1105-0-0 | REV. M
DIST.

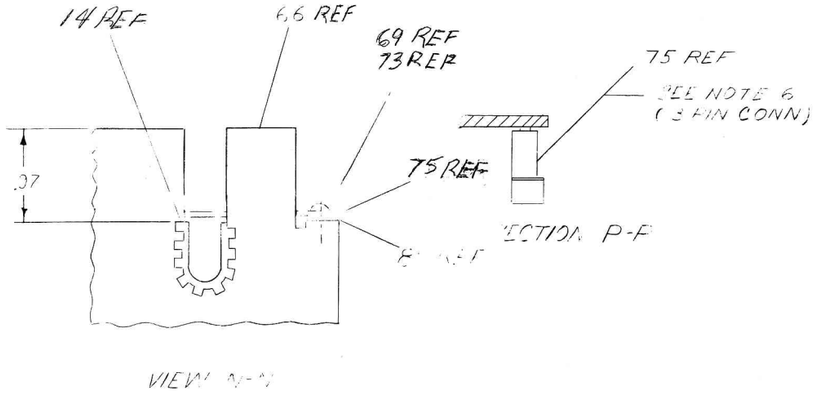
REVISIONS: REV. | CHANGE NO | CHK

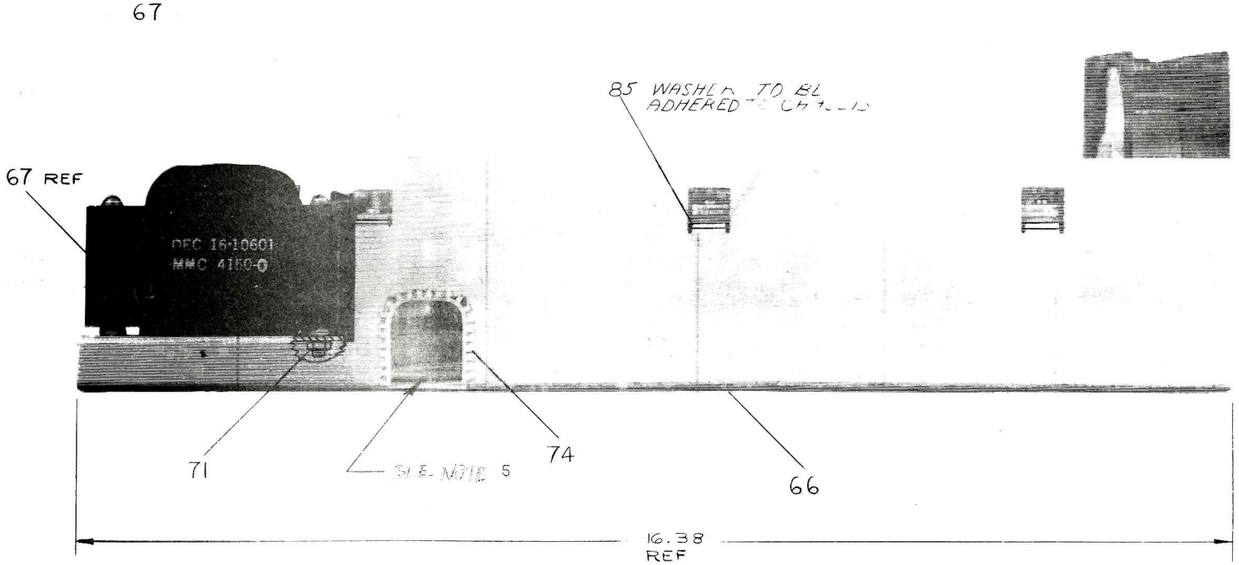
DEC FORM NO DRD 190-A

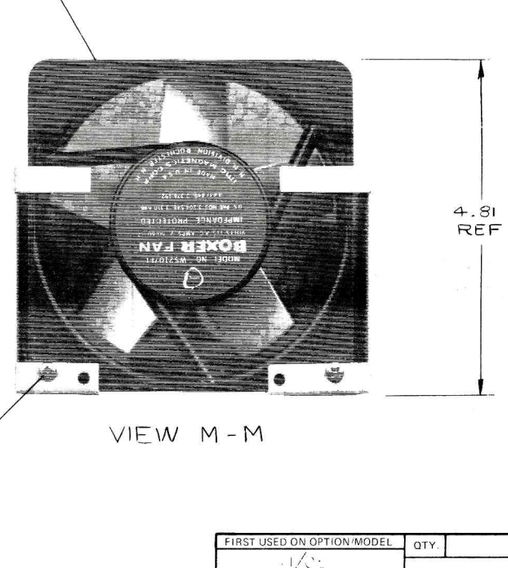
8 7 6 5 4 3 2 1

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission. 1973









FIRST USED ON OPTION/MODEL: -1/-2	QTY.	DESCRIPTION: PARTS LIST	PART NO. / ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES. DECIMALS: XXX .005, XX .02, X 1. ANGLES: ±0° 30'. REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓	DRN J. CAHILL	DATE 2.24.72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
	CHK C. TESCHNER	DATE 4-14-72	
	ENG A. LYONS	DATE 5-15-72	TITLE: 16 BIT COMPUTER ASSY (PDP 1105)
	PROJ ENG B. WEEKS	DATE 5-16-72	
	PROD R. PETERSON	DATE 5-16-72	
MATERIAL: SEE PART LIST	NEXT HIGHER ASSY: B-DD-1105-0		SIZE D / CODE UA / NUMBER 1105-0-0 / REV. M
FINISH: —	SCALE: —		DIST.
	SHEET 4 OF 6		

REVISIONS: REV | CHANGE NO | CHK

DEC FORM NO DRD 100-A

SIZE D / CODE UA / SYSTEM 1105-0 / REV. M

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

COPYRIGHT © 1973
DIGITAL EQUIPMENT
CORPORATION

WIRE TABLE

ITEM NO.	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONN	TO POINT	TO CONN.	SIGNAL NAME
85	—	—	—	P1	—	J1	
	22	ORN	9	—	—		LTC
	18	BLK	7	—	—	TB1-1	GND
	18	RED	8	—	—	TB1-2	+5V
	14	BLK	4	—	—	TB1-3	GND
	22	GRY	5	—	—	TB1-4	+15V
	18	BLU	6	—	—	TB1-5	-15V
	18	VIO	3	—	—	TB1-6	DCLO
	18	YEL	2	—	—	TB1-7	ACLO
85	18	RED	1	—	—	TB1-8	+5V

LEGEND

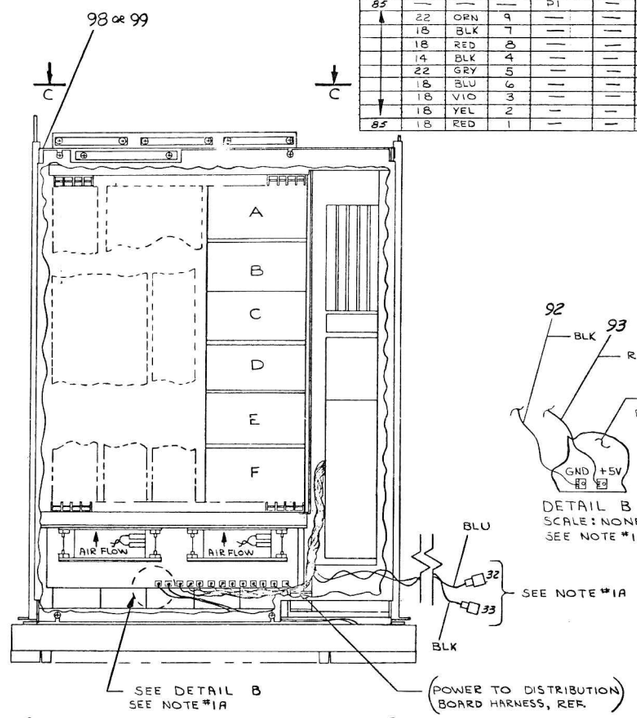
NUMBER	VARIATION
11/05 - NC	115V 60 HZ
11/05 - ND	230V 50 HZ

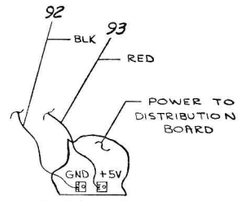
NOTES:

1A. POWER WIRING TO KY11-J CONSOLE (ITEM #3) IS AS FOLLOWS:
POINT NO'S. 32,33 (BLU/BLK TWP) OF POWER TO DISTRIBUTION BOARD HARNESS ARE TO BE CONNECTED TO KY11-J CONSOLE, AS SHOWN IN VIEW E-E.

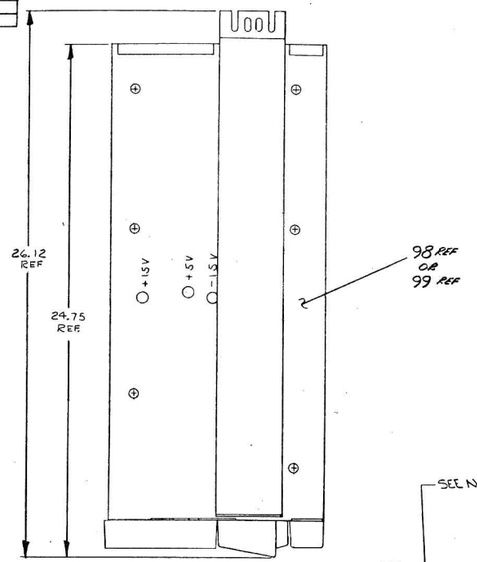
ITEM #92 (BLK WIRE) #93 (RED WIRE) TO BE CONNECTED AS SHOWN IN DETAIL-B
ITEM #93 (RED WIRE) GOING TO +5V AND ITEM #92 (BLK WIRE) GOING TO GND, THEN CONNECT LOOSE END OF ITEMS #92 & 93 TO KY11-J AS SHOWN IN VIEW D-D

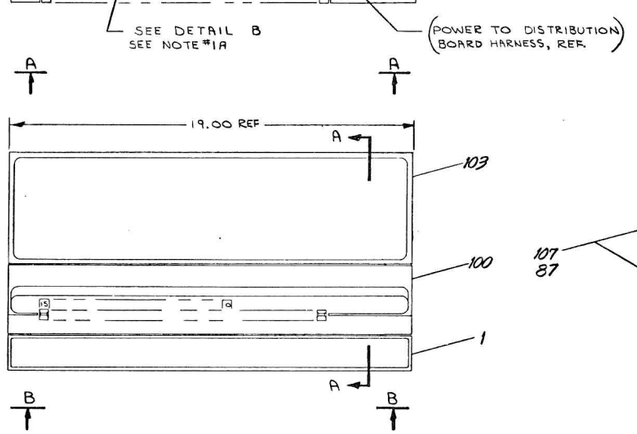
2A. INSTALLATION OF I/O CABLE, WHICH IS ALREADY CONNECTED TO CONSOLE ITEM NO 79, TO BE DRESSED TO FRONT PORTION OF CHASSIS AND ALONG POWER SUPPLY, THEN INTO CHASSIS WHERE CABLE IS CONNECTED TO M7260 BY USING 45° BENDS AND FASTENING WITH TIE WRAP HARDWARE. SEE DETAIL-C

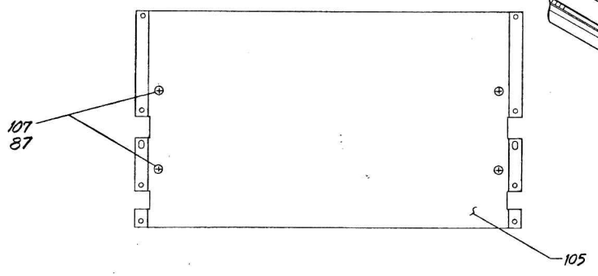




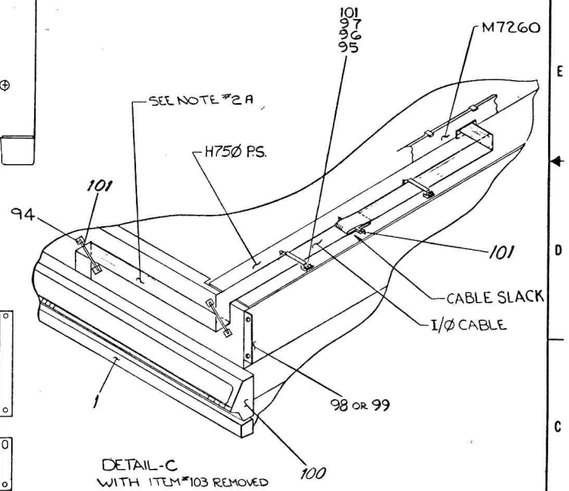
DETAIL B
SCALE: NONE
SEE NOTE #1A







VIEW A-A
ITEM #100, 1 & 107 REMOVED FOR CLARITY OF VIEW



DETAIL-C
WITH ITEM #103 REMOVED

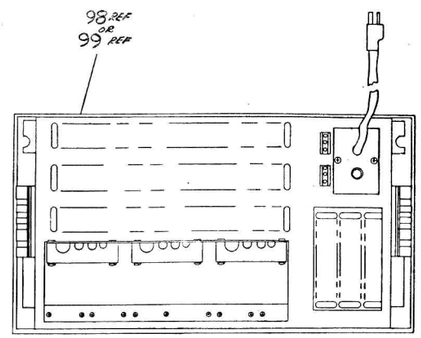
FIRST USED ON OPTION/MODEL: 11/5	QTY	DESCRIPTION: PARTS LIST	PART NO. / ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES: DECIMALS XXX ± .005, XX ± .02, X ± .1; ANGLES ±0° 30'	DRN J. CAHILL 8-72	DATE 8-13-72	DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓	DES T. KIRKHNER	DATE 8-13-72	TITLE: 16 BIT COMPUTER (PDP11Ø5)
MATERIAL —	APD A. LYONS	DATE 8-16-72	
FINISH —	PROJ ENG E. WEBER	DATE 8-16-72	
NEXT HIGHER ASSY. B-DD-11W5-Ø-Ø	QA R. PETERSON	DATE 8-16-72	SIZE E, CODE, NUMBER 11/05-Ø-Ø, REV M
SCALE NONE	SHEET 2 OF 2		DIST

DEC FORM 340, DRG 1400

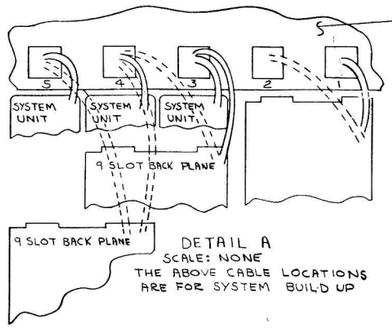
NX 11/05-Ø-Ø

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

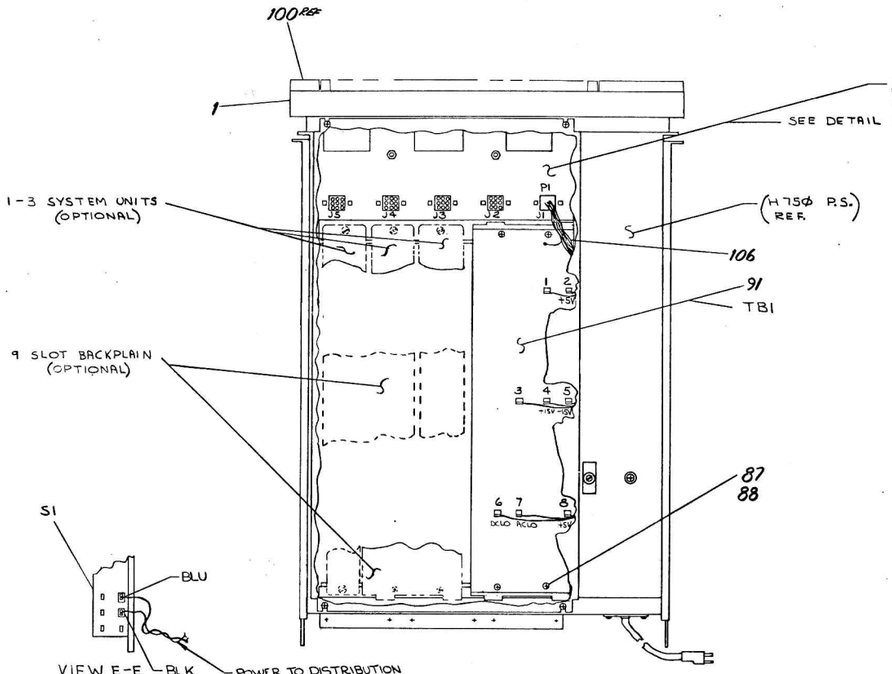
COPYRIGHT © 1973
DIGITAL EQUIPMENT
CORPORATION



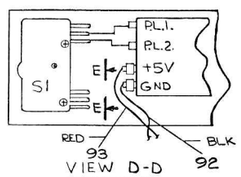
VIEW C-C



DETAIL A
SCALE: NONE
THE ABOVE CABLE LOCATIONS
ARE FOR SYSTEM BUILD UP



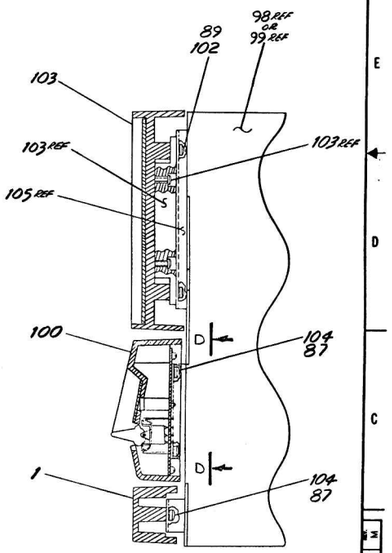
VIEW B-B



VIEW D-D
SCALE: NONE
SEE NOTE *1A

VIEW E-E
SCALE: NONE
SEE NOTE *1A

POWER TO DISTRIBUTION BOARD HARNESS. REF



SECTION A-A
SCALE: NONE

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS .XXX ± .005 .XX ± .02 X ± .1
ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN	J CAHILL	DATE 2-21-72
CHK	D TESCHNER	DATE 4-18-72
ENG	A LYONS	DATE 5-15-72
PROJ ENG	E WEISS	DATE 5-16-72
APVD	R PETERSON	DATE 5-16-72
NEXT HIGHER ASSY	B-DD-11/05-0-0	
SCALE	NONE	
SHEET	6 OF 6	

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: 16 BIT COMPUTER (PDP 11/05)

SIZE E | CODE UA | NUMBER 11/05-0-0 | REV. M | DIST

CHANGE NO. | REVISIONS | BY | CHK

DEC FORM NO. 4 100

11/05-0-0

14

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission. 1973

ITEM NO.	DWG. NO./PART NO.	DESCRIPTION	11Ø5-FA	11Ø5-FB	11Ø5-FE	11Ø5-FF	11Ø5-HA	11Ø5-HB	11Ø5-JA	11Ø5-JB	11Ø5-KA	11Ø5-KB	11Ø5-LA	11Ø5-LB	11Ø5-MA	11Ø5-MB	11Ø5-PA	11Ø5-PB	11Ø5-NC	11Ø5-ND
1	C-IA-7411273-Ø-Ø	1.75 FOLDED STRIP	1	1	1	1	1	1	1	1	1	1	1	1	X	X	X	X	/	/
2	D-UA-KY11-JA-Ø	CONSOLE ASSY	X	X	X	X	1	1	1	1	1	1	1	1	X	X	X	X	/	X
3	C-MD-7409470-Ø-Ø	COVER, TOP	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
4	E-IA-7409458-Ø-Ø	CHASSIS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
5	D-IA-7409459-Ø-Ø	BRACKET,CHASSIS SLIDE (L.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
6	1209403	FAN, SUPER BOXER	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
7	E-PS-1211100-Ø-Ø	CARD GUIDE ASSY (L.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	/	X
8	D-AD-7008946-Ø-Ø	BACK PANEL ASSY (8K)	1	1	1	1	X	X	X	X	1	1	1	1	X	X	X	X	X	X
9	D-AD-7008845-2-Ø	BACK PANEL ASSY (16K)	X	X	X	X	1	1	1	1	X	X	X	X	X	X	X	X	X	X
10	9009101	SCR PHL HD PAN NYLOK *8-32 x 1/4 LG	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	X	X
11	E-IA-7008858-Ø-Ø	HARNESS (D.C.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
12	C-IA-7410[illegible]-0-0	RET. CONN. BLOCK (L.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
13	C-UA-BCØ5H-Ø-Ø	LINE SET BCØ5H (115V/60HZ)	1	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	X	X
14	C-UA-BCØ5J-Ø-Ø	LINE SET BCØ5J (230V/50HZ)	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	X
15	C-IA-7409449-Ø-Ø	BRACKET,CHASSIS SLIDE (R.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
16	E-IA-7008713-Ø-Ø	AC INPUT HARNESS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
17	D-PS-1211381-Ø-Ø	AIR BAFFLE	3	3	3	3	3	3	3	3	3	3	3	3						
18	E-PS-1211099-Ø-Ø	CARD GUIDE ASSY (R.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
19	C-IA-7410[illegible]78-Ø-Ø	RET. CONN. BLOCK (R.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
20	D-IA-7409463-Ø-Ø	FAN MTG PLATE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
21	C-MD-7409479-Ø-Ø	PLATE, PRESSURE	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
22	9006047-1	SCR PHL HD PAN *8-32 x 2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
23	D-PS-1210931-Ø-Ø	BLOCK, CABLE RETAINING	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
24	C-MD-7409480-Ø-Ø	SWIVEL NUT	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
25	D-MD-7409482-Ø-Ø	PLATE LOWER RETAINER	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
26	9006024-1	SCR PHL HD PAN *6-32 x 1/2	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
27	9009165	FAN CLIP	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
28	C-PS-1210698-Ø-Ø	GUIDE CARD CENTER	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
29	C-IA-7008820-Ø-Ø	HEADER CABLE ASSY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
30	9006074-3	SCR PHL HD TRUSS #10-32 x 5/8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
31	9009186	SCR PHL HD PAN NYLOC #6-32 x 5/16	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
32	9006071-3	SCR PHL HD TRUSS #10-32 x 3/8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
33	9007651	WASHER EXT TOOTH #10	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
34	D-IA-7409533-Ø-Ø	COVER SIDE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
35	C-MD-7409591-Ø-Ø	CLAMP	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
36	9009173	SCR BINDER HD NYLON #8-32 x 1/4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
37	9008074	SPACER 1/2" AF x 5/16-#10	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
38	1210945	CHASSIS SLIDE	X	1	1	1	1	1	1	1	1	1	1	1	X	X	X	X	X	X
39	9008196	CLIP-ON RECPT.-SOUTHCO #82-47-104-15	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
40	D-MU-11Ø5-Ø1-0	MODULE UTILIZATION (8K)	1	1	1	1	X	X	X	X	1	1	1	1	1	1	1	1	X	X
41	D-MU-11Ø5-Ø2-0	MODULE UTILIZATION (16K)	X	X	X	X	1	1	1	1	X	X	X	X	X	X	X	X	X	X
42	9009192	SCR PHL HD PAN NYLOC #8-32 x 3/8	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
43	9006005-1	SCR PHL HD PAN #2-56 x 1/2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X

QUANTITY / VARIATION

REVISIONS			
CHK	CHANGE NO.	REV.	
	11Ø5-00040	F	REVISED & REDRAWN 4-4-72 S. Glasgow M. TITLEBAUM
	11Ø5-00041	H	D. Randall 11-17-72
	11Ø5-00044	J	G. GRAHAM 2-8-73
	11Ø5-00046A	K	G GRAHAM 6-4-73 D. RANDALL 7-27-73
	11Ø5-00047A	L	D. RANDALL 7-27-73
	11Ø5-00048	M	GRAHAM 9-6-73

FIRST USED ON OPTION/MODEL: 11/Ø5

UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

DRN.	J. CAHILL	DATE 2/25/
CHK'D.	C. TESCHNER	DATE 5/2/
ENG.	A. LYONS	DATE 5/15/2
PROJ. ENG.	B. WEEKS	DATE 5/16/
PROD.	R. PETERSON	DATE 5/16/
NEXT HIGHER ASSY.	D-UA-1105-0-0	
SCALE		
SHEET	1 OF 3	

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: 16 BIT COMPUTER ASSY (PDP 11Ø5)

SIZE	CODE	NUMBER	REV.
C	PL	1105-0-0	M

DIST.

SIZE C | CODE 14 | NUMBER 1105 0 0 | REV. M

SEE PAGE NO.

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

ITEM NO.	DWG. NO./PART NO.	DESCRIPTION	QUANTITY / VARIATION																	
			11Ø5-FA	11Ø5-FB	11Ø5-FE	11Ø5-FF	11Ø5-HA	11Ø5-HB	11Ø5-JA	11Ø5-JB	11Ø5-KA	11Ø5-KB	11Ø5-LA	11Ø5-LB	11Ø5-MA	11Ø5-MB	11Ø5-PA	1 Ø5-PB	11Ø5-NC	11Ø5-ND
44	9006031	WASHER INT TOOTH #	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
45	9008447	CABLE CLAMP (1/4)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
46	9009210-0	SCOTCH BRAND ADHESIVE TRANSFER TAPE	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	X	X
47																				
48	7409729-Ø1	JUMPER POWER (BLACK)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
49	7409729-Ø2	JUMPER POWER (RED)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
50	9009224	SCR SLOT PAN HD #8-32 x 1/4 LG	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	X	X
51	A-DC-5309900-0-0	POWER CONTROL DECAL (230V)	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	X
52	A-DC-5309899-0-0	POWER CONTROL DECAL (115V)	1	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	X	X
53	B-MD-740981 -0-0 *	SHIPPING BRACKET	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
54	9008143-1	SCR PHL HD PAN #8-32 X 1/4 THD CUTTING	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
55	B-MD-7409817-0-0	PLATE, CABLE CLAMP	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
56	C-MD-7409818-0-0	BRACKET CABLE CLAMP	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
57	9006011-2	SCR PHL HD FLAT #4-40 X 3/8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
58	B-MD-7409828-0-0	BRACKET	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
59	9007694	QUIK DISCONNECT	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
60	7409903	JUMPER POWER (BLACK)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
61	D-UA-KY11-JC-Ø	CONSOLE ASSY	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	1	X	X
62	D-MD-7409978-0-0	BOTTOM TRIM	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	1	X	X
63	D-AD-7009119-0-0	BACK PANEL ASSY	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	1	X	X
	* USED ONLY WHEN INSTALLED IN CABINET																			
64	D-IA-7409533-1-0	COVER SIDE	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	1	X	X
65	1700021-0	ELECTROMAGNETIC SHIELD 1 OZ. CU	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	1	1
66	E-IA-5309816-0-0	CHASSIS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
67	D-IA-7008726-0-0	TRANSFORMER MMC 415° -1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
68	9006024-1	SCR PHL PAN HD #6-32 X.50 LG	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
69	9006021-1	SCR PHL PAN HD #6-32 X.31LG	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
70	9006031-1	SCR PHL PAN HD #6-32 X1.75 LG	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
71	9006563	NUT KEPS #8-32	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
72	9006560	NUT KEPS #6-32		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
73	9007649	WASHER EXT. LOCK #6-32	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
74	9007035	GROMMET CATERPILLAR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	X	X
75	E-IA-5409728-0-0	REGULATOR BOARD	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
76	D-UA-KY11-JF-0	CONSOLE ASSY	1	1	1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X
77	A-DC-5309413-0-0	SPECIAL DECAL (UL)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
78	A-DC-5309414-0-0	SPECIAL DECAL (UL)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
79	9008181-1	SCR PHL. PAN HD TYPE F 6-32 X .50LG	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
80	9009525-1	SCR, PHL PAN HD TYPE F 6-32 X .37LG	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
81	9009070	SCRPHL FLAT HD SPECIAL 8-32X.81LG	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
82	9009543	FOAM 3/8 X 1 X 3 3/4LG	1	1	1	1	1	1	1	1	1	1	1	1	—	—	—	—	X	X
83	9009542	FOAM ½ X 5/16 X 7 9/16LG	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
84	9009544	FOAM ¼ X ⅛ X 16½LG	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
85	9008848	FIBER WASHER 5/32ID X ½ OD X 3/32	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
86	A-DC-7411255-0-0	LABEL (REMOVE FOAM)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X

REVISIONS | CHANGE NO. | REV. | CHK

FIRST USED ON OPTION/MODEL: 11Ø5

UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 | FRACTIONS ± 1/64 | ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

DRN. J. CAHILL	DATE 2/25/2	
CHK'D. C. TESCHNER	DATE 5/2/2	
ENG. A. LYONS	DATE 5/15/2	
PROJ. ENG. B. WEEKS	DATE 5/16/2	
PROD. R. PETERSON	DATE 5/16/2	

NEXT HIGHER ASSY. D-UA-1105-0-0

SCALE

SHEET 2 OF 3

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
16 BIT COMPUTER
ASSY (PDP 11Ø5)

SIZE	CODE	NUMBER	REV.
C	PL	1105 0-0	M

DIST.

SIZE C | CODE 14 | NUMBER 11Ø,00 | REV. M

DEC FORM NO. DRC 1111

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

ITEM NO.	DWG. NO./PART NO.	DESCRIPTION	1105-FA	1105-FB	1105-FE	1105-FF	1105-HA	1105-HB	1105-JA	1105-JB	1105-KA	1105-KB	1105-A	1105-B	1105-MA	1105-MP	1105-PA	1105-PB	1105-N	1105-NA	QUANTITY / VARIATION
87	9ØØ6Ø25	WASH INT TOOTH #10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	10	10	
88	9ØØ6Ø43-1	SCR PHL HD PAN #8-32 x 1.0 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1	
89	9ØØ6Ø35-1	SCR PHL HD PAN #8-32 x .25 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4	4	
90	D-MU-1105-Ø-Ø7	MODULE UTILIZATION (16K)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1	
91	D-UA-7ØØ95Ø5-Ø-Ø	WIRED ASSY	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1	
92	B-IA-74Ø9729-Ø3	JUMPER POWER (BLK)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1	
93	B-IA-74Ø9729-Ø4	JUMPER POWER (RED)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1	
94	9ØØ8264	CLAMP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4	4	
95	9ØØ7Ø31	TIE WRAP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2	2	
96	9ØØ7649	WASH EXT TOOTH #6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2	2	
97	9ØØ6Ø2Ø-1	SCR PHL HD PAN #6-32 x .1/4 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2	2	
98	E-UA-BA11-DA-Ø	CHASSIS ASSY (115V)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	X	
99	E-UA-BA11-DB-Ø	CHASSIS ASSY (230V)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	
100	D-UA-KY11-JD-Ø	CONSOLE ASSY	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1	
101	9ØØ8442	TIE WRAP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	8	8	
102	9ØØ6634	WASHER INT TOOTH #8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	8	8	
103	A-PL-7ØØ8847-Ø-Ø	BEZEL KIT ASSY	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1	
104	9ØØ6Ø71-1	SCR PHL HD PAN #10-32 x .38 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	6	6	
105	D-MD-741Ø664-Ø-Ø	CONSOLE MTG BRK'T (10.5)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1	
106	D-IA-7ØØ936Ø-Ø-Ø	CPU POWER HARNESS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1	
107	9ØØ6Ø7Ø-1	SCR PHL HD PAN #10-32 x .31 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4	4	
108	A-DC-7411305-0-0	DECAL (10 1/2" MODULE UTILIZATION)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1	

REVISIONS

REV.	CHANGE NO.	CHK

FIRST USED ON OPTION/MODEL
1105

UNLESS OTHERWISE SPECIFIED
UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

		DATE
DRN.	J.CAHILL	2/25/2
CHK'D.	C.TESCHINER	5/2/72
ENG.	A.LYONS	5/15/2
PROJ. ENG.	B.WEEKS	5/16/2
PROD.	E.PETERSON	5/16/2

NEXT HIGHER ASSY.
B-DD-1105-Ø

SCALE

SHEET 3 OF 3

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

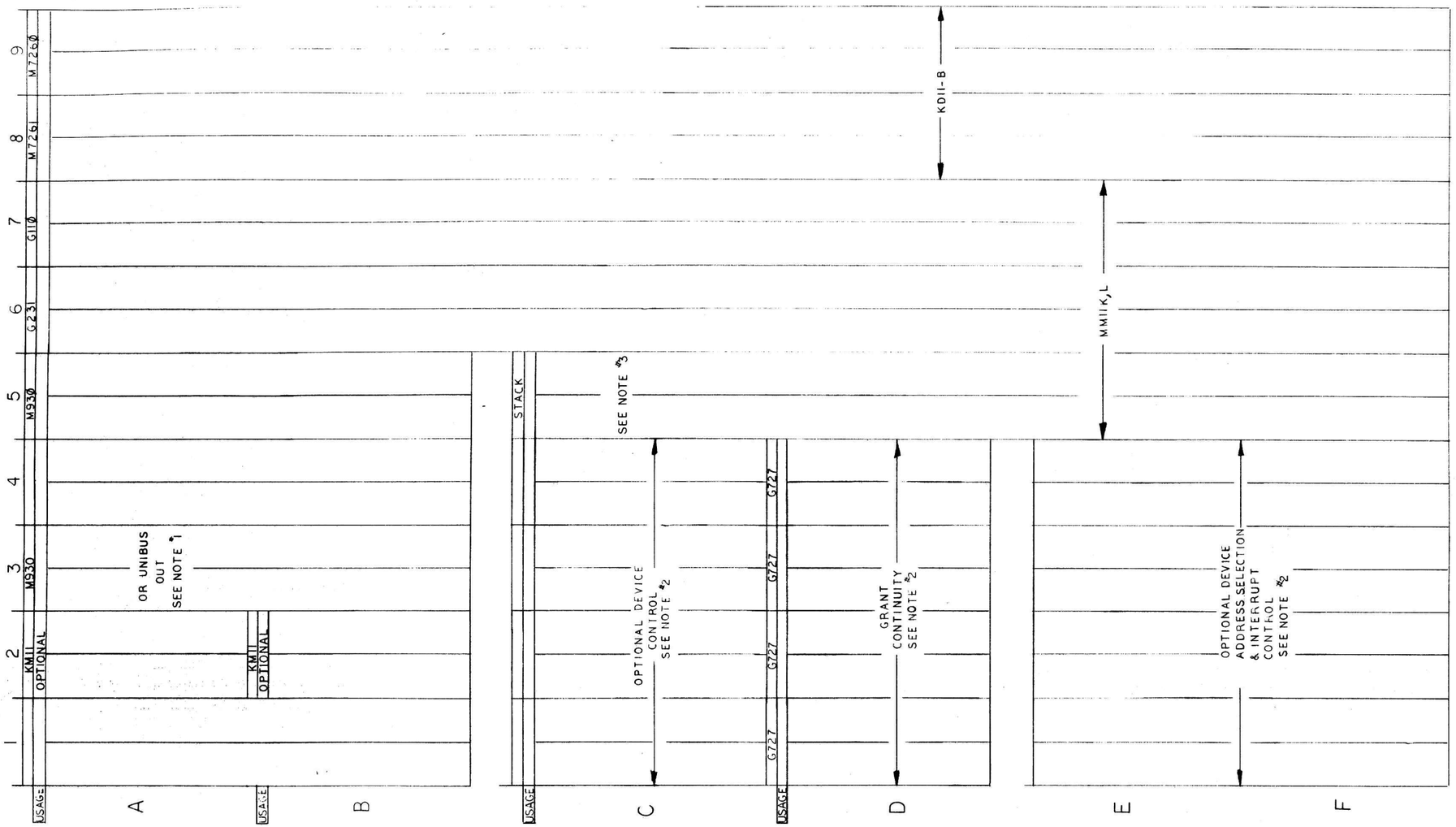
TITLE
16 BIT COMPUTER
ASSY (PDP1105)

SIZE	CODE	NUMBER	REV.
C	PL	1105-Ø-Ø	M

DIST.

DEC FORM NO.
DRC 110

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



NOTES:

1. BEFORE THE 1105 IS CONNECTED TO OTHER SYSTEM OPTIONS, THE M930 BUS TERMINATOR IS IN LOCATION A, B03. THIS TERMINATOR IS MOVED TO THE END SYSTEM OPTION UPON INTERCONNECTION

2. PREWIRED MODULE SLOTS FOR SMALL PERIPHERAL OPTIONS. WITH NO OPTIONS INSTALLED, BUS GRANT CONTINUITY IS PROVIDED BY G727 MODULE IN LOCATION D01, D02, D03, D04. THE G727 IS REMOVED WHEN A SMALL PERIPHERAL OPTION IS INSTALLED

3. IF MM11K, STACK IS H213
   IF MM11L, STACK IS H214

CONFIGURATION #2
(8 K)

ITEM NO.	DESCRIPTION	PART NO.	QTY.
5	CENTRAL PROCESSOR	B-DD-KD11-B-0	1
4	GRANT CONTINUITY	A-PL-G727-0-0	4
3	16BIT 18MIL MEMORY	B-DD-MM11-L-0	1
2	BUS TERMINATOR	A-PL-M930-0-0	2
1	MAINTENCE BOARDS	A-PL-KM11-0-0	*

PARTS LIST

FIRST USED ON OPTION/MODEL: PDP-1105

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. C. Teschner DATE 4-24-72
CHK'D DATE
ENG. DATE 5-4-72
PROJ. ENG. DATE 5-4-72
PROD. DATE 7/8/72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: MODULE UTILIZATION (8K)

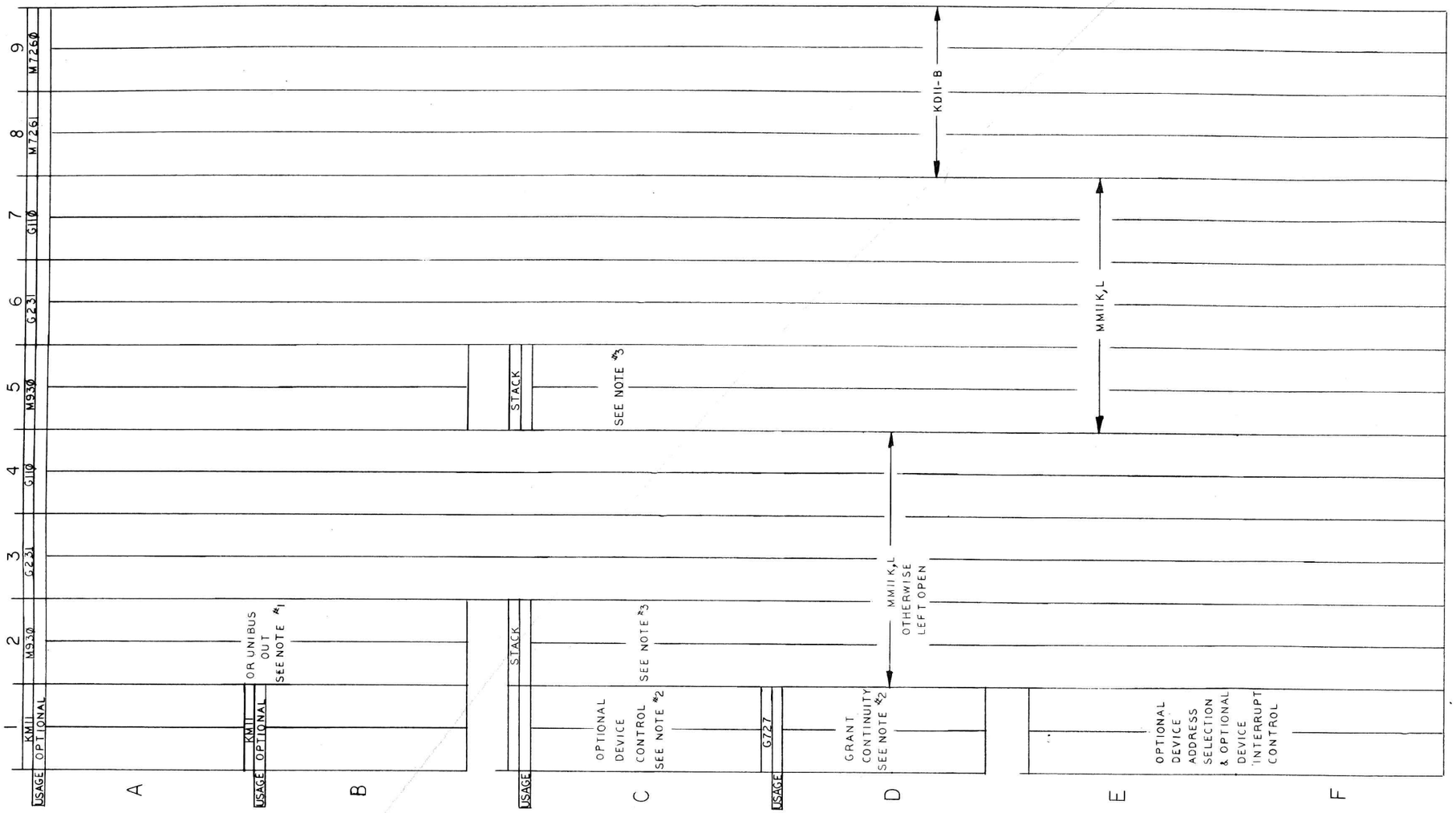
NEXT HIGHER ASSY. D-UA-1105-0-0
SIZE D | CODE MU | NUMBER 1105-0-02 | REV.
SCALE
SHEET 1 OF 1 | DIST.

REVISIONS		
REV.	CHANGE NO.	CHK

DEC FORM NO. DRD 100-A

18

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



CONFIGURATION #1
(16K)

NOTES:

1. BEFORE THE 1105 IS CONNECTED TO OTHER SYSTEM OPTIONS, THE M930 BUS TERMINATOR IS IN LOCATION A, B02. THIS TERMINATOR IS MOVED TO THE END SYSTEM OPTION UPON INTERCONNECTION

2. PREWIRED MODULE SLOTS FOR SMALL PERIPHERAL OPTIONS. WITH NO OPTIONS INSTALLED, BUS GRANT CONTINUITY IS PROVIDED BY G727 MODULE IN LOCATION D01. THE G727 IS REMOVED WHEN A SMALL PERIPHERAL OPTION IS INSTALLED

3. IF MM11-K, STACK IS H213
   IF MM11-L, STACK IS H214

QTY.	DESCRIPTION	PART NO.	ITEM NO.
1	CENTRAL PROCESSOR	B-DD-KD11-B-0	5
1	GRANT CONTINUITY	A-PL-G727-0-0	4
1	16BIT 18 MIL MEMORY	B-DD-MM11-L-0	3
2	BUS TERMINATOR	A-PL-M930-0-0	2
*	MAINTENCE BOARDS	A-PL-KM11-0-0	1

PARTS LIST

FIRST USED ON OPTION/MODEL: PDP-1105

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. C. Teschner	DATE 4-24-72	
CHK. [illegible]	DATE 5-4-72	
ENG. [illegible]	DATE 5-4-72	
PROJ/ENG. [illegible]	DATE 5-9-72	
PROD. [illegible]	DATE 5/10/72	

NEXT HIGHER ASSY. D-UA-1105-0-0
SCALE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: MODULE UTILIZATION (16K)

SIZE	CODE	NUMBER	REV.
D	MU	1105-0-01	

DIST.

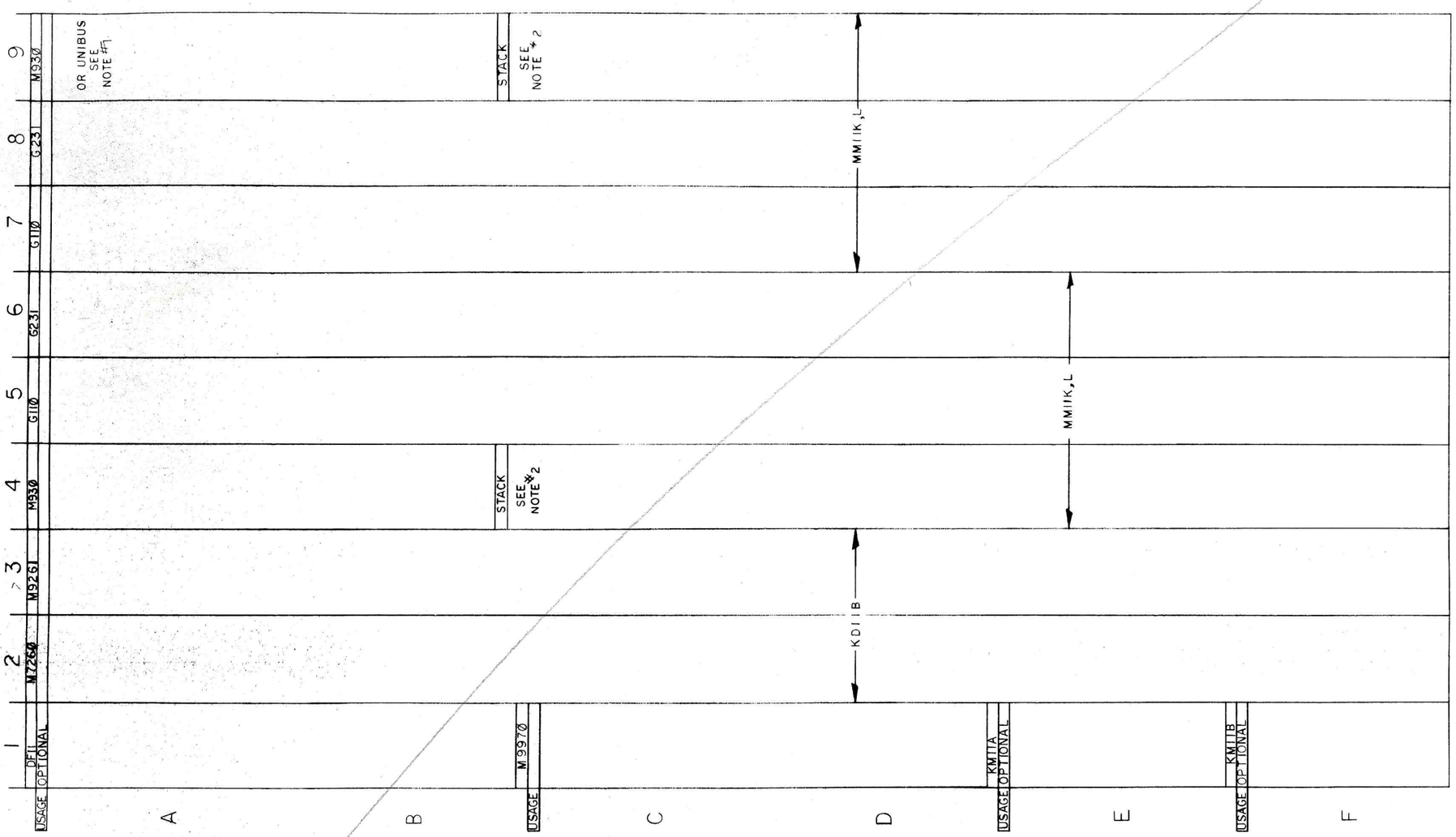
REVISIONS: REV. | CHANGE NO. | CHK

DEC FORM NO. DRD 100-A

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

COPYRIGHT © DIGITAL EQUIPMENT CORPORATION

NOTES:
1. BEFORE THE 11Ø5 IS CONNECTED TO OTHER SYSTEM OPTIONS, THE M93Ø BUS TERMINATOR IS IN LOCATION A,BØ9. THIS TERMINATOR IS MOVED TO THE END SYSTEM OPTION UPON INTERCONNECTION.
2. IF MM11-K, STACK IS H213; IF MM11-L, STACK IS H214.



1	M9970	D-CS-M9970-Ø-1	5
1	CENTRAL PROCESSOR	B-DD-KD11-B-Ø	4
1	16 BIT 18MIL MEMORY	B-DD-MM11-L-Ø	3
2	BUS TERMINATOR	A-PL-M930-ØØ	2
*	MAINTENCE BOARDS	A-PL-KM11-ØØ	1
QTY.	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

FIRST USED ON OPTION/MODEL: PDP-11Ø5

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

FINISH —

DRN. K. Ramos	DATE 12-11-72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D	DATE 1-11-73	
ENG.	DATE 1-11-73	
PROJ. ENG.	DATE 1-11-73	
PROD.	DATE 1-23-73	

TITLE: MODULE UTILIZATION (16K)

NEXT HIGHER ASSY.: D-UA-11Ø5-Ø-Ø

SCALE —

SHEET 1 OF 1

SIZE	CODE	NUMBER	REV.
D	MU	11Ø5-Ø-Ø7	

DIST

digital EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

DRAWING DIRECTORY

CUSTOMER PRINT SET INDEX

THIS IS PRINT SET [/]

SEQUENCE		SEQUENCE	
16 BIT PROCESSOR KD11-B	✓ B-DD-KD11-B		
MICROPROGRAM FLOW	✓ K-MP-KD11-B-1		
MICROPROGRAM SYMBOLIC LISTING	✓ K-MP-KD11-B-2		
MICROPROGRAM BINARY LISTING	✓ K-MP-KD11-B-3		
MICROPROGRAM CROSS REF. LISTING	✓ K-MP-KD11-B-4		
DATA PATHS	✓ B E-CS-M726Ø-Ø-1		
DATA PATH ROM PATTERNS	✓ K-RL-M726Ø-Ø-8		
CONTROL LOGIC & MICROPROGRAMS	✓ B E-CS-M7261-Ø-1		
CONTROL LOGIC ROM PATTERNS	✓ B K-RL-M7261-Ø-8		

UNIT VARIATIONS

VARIATION	TITLE	PRINT SET TYPE (KD11-B)
KD11-B	16 BIT PROCESSOR	

REVISIONS	REV	CHG. NO.	DATE
	A	KD11B-2	K
	H	KD11B-3	MT
	C	KD11B-4	M.T.
	D	KD11B-5	D.R.

USED ON OPTION/MODEL

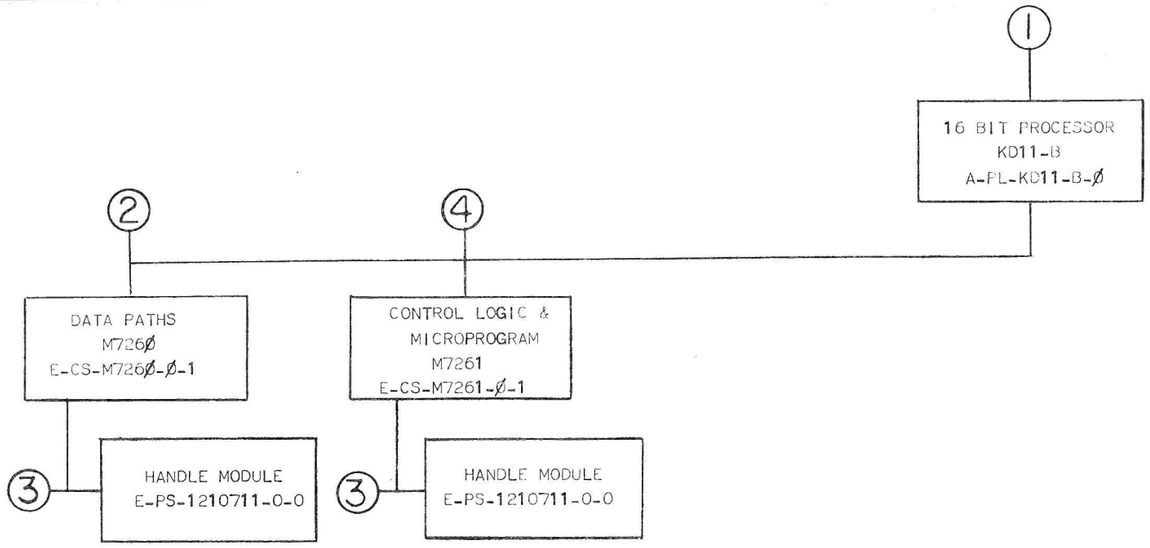
DRN. J.CAHILL	DATE 4/21/72	TITLE: 16 BIT PROCESSOR KD11-B
CHK'D. C.Teschner	DATE 5-15-72	
PROJ ENG. A. Tacher	DATE 5-16-72	
PROD.	DATE 5/16/72	
FIELD SERV.	DATE	
SHEET 1 OF 3		

SIZE	CODE	NUMBER	REV
B	DD	KD11-B	D

DIST

DRB 106

DEC 16-(325)-1062-1 N871



TITLE		SIZE	CODE	NUMBER	REV
16 BIT PROCESSOR KD11-B	SHEET 2 OF 3	B	DD		

ELECTRICAL

CUSTOMER PRINT SET KD11-B	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO.
		1.	A-PL-KD11-B-Ø		1	16 BIT PROCESSOR (KD11-B)	
C			K-MP-KD11-B-1	B	22	MICOPROGRAM FLOW	
C			K-MP-KD11-B-2	D	6	MICROPROGRAM SYMBOLIC LISTING	
C			K-MP-KD11-B-3	D	7	MICROPROGRAM BINARY LISTING	
C			K-MP-KD11-B-4		3	MICROGROGRAM CROSS REF. LISTING	
X		2.	E-CS-M726Ø-Ø-1	#N	10	DATA PATHS (M726Ø)	
			B-MH-M726Ø-Ø-6		1	MODULE ECO HISTORY	
			K-CO-M726Ø-Ø-4		1	X-Y CO-ORDINATE HOLE LOCATION	
			B-AH-M726Ø-Ø-5		1	ASSY/DRILLING HOLE	
X			K-RL-M726Ø-Ø-8	#	15	DATA PATH ROM PATTERNS	
X		4.	E-CS-M7261-Ø-1	#P	13	CONTROL LOGIC & MICROPROGRAM	
			B-MH-M7261-Ø-6		1	MODULE ECO HISTORY	
			K-CO-M7261-Ø-4		1	X-Y CO-ORDINATE HOLE LOCATION	
			B-AH-M7261-Ø-5		1	ASSY/DRILLING HOLE	
X			K-RL-M7261-Ø-8	#A	5	CONTROL LOGIC ROM PATTERNS	

MECHANICAL

CUSTOMER PRINT SET KD11-B	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO.
		1.	A-PL-KD11-B-Ø		1	16 BIT PROCESSOR (KD11-B)	
		2.	E-CS-M726Ø-Ø-1		10	DATA PATHS (M726Ø)	
			B-MH-M726Ø-Ø-6		1	MODULE ECO HISTORY	
			K-CO-M726Ø-Ø-4		1	X-Y CO-ORDINATE HOLE HISTORY	
			B-AH-M726Ø-Ø-5		1	ASSY/DRILLING HOLE	
		3.	E-PS-1210711-0-0		1	HANDLE MODULE	
		4.	E-CS-M7261-Ø-1		13	CONTROL LOGIC & MICROPROGRAM	
			B-MH-M7261-Ø-6		1	MODULE ECO HISTORY	
			K-CO-M7261-Ø-4		1	X-Y CO-ORDINATE HOLE LOCATION	
			B-AH-M7261-Ø-5		1	ASSY/DRILLING HOLE	

TITLE		SIZE	CODE	NUMBER	REV
16 BIT PROCESSOR KD11-B	SHEET 3 OF 3	B	DD	KD11-B	D

PAGE REVISION CONTROL SHEET

SH NO.	PAGE REVISIONS	REMARKS
1	A B	
2	A A	
3	A A	
4	A A	
5	A A	
6	A A	
7	A B	
8	A A	
9	A A	
10	A A	
11	A A	
12	A A	
13	A A	
14	A A	
15	A A	
16	A A	
17	A A	
18	A A	
19	A A	
20	A A	
21	A A	
22	A A	
ECO NO.	KD112-2 KD112-3	
ETCH REV.		
ENG.	BA MT	
DATE	8-28-72 9-21-72	

FIRST USED ON OPTION/MODEL

KD11-B

DRN. G. TOWNE	DATE 8-21-72	
CHK'D. J McCullough	DATE 8-21-72	
ENG. Bob Armstrong	DATE 8-29-72	
PROJ. ENG. Bob Armstrong	DATE 8-29-72	
PROD.	DATE	

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE

MICROPROGRAM FLOW

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
COPYRIGHT © 1972 DIGITAL EQUIPMENT CORPORATION"

NEXT HIGHER ASSY. B-DD-KD11-B

SCALE 1/1

SHEET 1 OF 22

SIZE	CODE	NUMBER	REV.
K	MP	KD11-B-1	B

DIST.

```
/              NOTES ON NOTATION:
/
/
/                     1;  MICROROUTINES BEGIN WITH A COMMENT
/                     THE FIRST CHARACTER OF WHICH IS '*',
/
/                     2;  ALL OTHER COMMENTS BEGIN WITH '/',
/
/                     3;  R[N] REFERRS SCRATCH PAD REGISTER N,
/                     R[7] IS ALSO REFERRED TO AS 'PC',
/
/                     4;  R[S] REFERRS TO THAT REGISTER SPECIFIED
/                     IN THE SOURCE PORTION OF THE CURRENT INST,
/                6-8  (IR<11:9>);  LIKEWISE, R[D] REFERRS TO THAT
/                     REG SPECIFIED IN THE DESTINATION PORTION OF
/                     THE CURRENT INST, (IR<2:0>),
/
/                     5;  K[N] REFERRS TO THAT LOCATION OF THE
/                     CONSTANTS CHIP CONTAINING THE CONSTANT N,
/
/                     6;  'BUT' STANDS FOR 'BRANCH ON MICRO TEST',
```

```
LOC  NXT  * INSTRUCTION FETCH
062  053  F=1   BA=PC; DATI
053  365  F=2   B=PC+2
365  364  F=3   PC=B; CKOFF
364  061  F=4   B,IR=UNIBUS DATA
061  001  F=5   B=B SEX; BUT IR DECODE
          / IF DOUBLE OP INST GOTO S0=1 THRU S7=1 DEPENDING ON SOURCE MODE
          / IF SINGLE OP INST GOTO D0=1 THRU D7=1 DEPENDING ON DEST MODE (INCLUDING JSR)
          / IF BRANCH, CHANGE PC GOTO B=1
          / IF BRANCH, PC UNCHANGED GOTO B2=2
          / IF CLEAR OR SET COND CODE(S) GOTO CCM=1
          / IF INST=RTS GOTO R1=1
          / IF INST=RTI GOTO R2=1
          / IF INST=WAIT GOTO W=1
          / IF INST=HALT GOTO H=1
          / IF INST=RESET GOTO RST=1
          / IF INST=EMT GOTO ET=1
          / IF INST=BREAKPOINT TRAP GOTO BT=1
          / IF INST=IOT GOTO IT=1
          / IF INST=TRAP GOTO T=1
          / IF RESERVED INST (NONE OF THE ABOVE) GOTO RT=1
```



```
LOC  NXT  * SOURCE MODE 0 (REGISTER), GET SOURCE DATA
          / GET TO S0=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=0
201  007  S0=1  B=R[S]; BUT BYTE
          / IF BYTE INST GOTO SBE=1 (MUST BE EVEN BYTE)
007  001  S0=2  R[10]=B; BUT DESTINATION
          / IF IR<5:3>  =0 GOTO D0=1
          /             =1      D1=1
          /             =2      D2=1
          /             =3      D3=1
          /             =4      D4=1
          /             =5      D5=1
          /             =6      D6=1
          /             =7      D7=1
```

```
LOC  NXT  * SOURCE MODE 1 (REG, DEFERRED) GET SOURCE DATA
          / GET TO S1=1 FROM F=5 VIA BUT IR DECODE IR<11:9>
203  244  S1=1  BA=R[S]; DATI; CKOFF; ALBYT
          / GET TO S1=2 FROM S2=3 VIA GOTO
          /          "        S3=5    "
          /          "        S6=5    "
244  007  S1=2  B=UNIBUS DATA; BUT BYTE; GOTO S0=2
          / IF ODD BYTE GOTO SBO=1
          / IF EVEN BYTE GOTO SBE=1
          / IF NOT BYTE FALL THROUGH TO S0=2
```

```
LOC  NXT  * SOURCE MODE 2 (AUTO=INC,) GET SOURCE DATA
          / GET TO S2=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=2
205  301  S2=1  BA=R[S]; DATI; ALBYT
301  014  S2=2  B=R[S]+1+BYTE;BAR
          / GET TO S2=3 FROM S4=1 VIA GOTO
014  244  S2=3  R[S]=B; CKOFF; GOTO S1=2
```

```
LOC  NXT  *SOURCE MODE 3 (AUTO=INC DEFERRED) GET SOURCE DATA
          / GET TO S3=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=3
207  016  S3=1  BA=R[S]; DATI (MUST BE AN EVEN ADDRESS HERE)
016  017  S3=2  B=R[S]+2
```

```
        / GET TO S3=3 FROM S5=1 VIA GOTO
017  134  S3=3  R[S]←B; CKOFF
        / GET TO S3=4 FROM S7=5 VIA GOTO
134  274  S3=4  B←UNIBUS DATA
274  244  S3=5  BA←B; DATI; CKOFF; GOTO S1=2; ALBYT



LOC  NXT  * SOURCE MODE 4 (AUTO=DEC) GET SOURCE DATA
        / GET TO S4=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=4
211  014  S4=1  B,BA←R[S]=1←BYTE,BAR; DATI; ENABOVER; GOTO S2=3; ALBYT



LOC  NXT  * SOURCE MODE 5 (AUTO=DEC DEFERRED) GET SOURCE DATA
        / GET TO S5=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=5
213  017  S5=1  B,BA←R[S]=2; DATI(MUST BE AN EVEN ADDRESS HERE); ENABOVER; GOTO S3=3



LOC  NXT  * SOURCE MODE 6 (INDEXED) GET SOURCE DATA
        / GET TO S6=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=6
215  025  S6=1  BA←PC; DATI(MUST BE EVEN ADDRESS HERE)
025  026  S6=2  B←PC+2
026  027  S6=3  PC←B; CKOFF
027  030  S6=4  B←UNIBUS DATA
030  244  S6=5  BA←B+R[S]; DATI; CKOFF; GOTO S1=2; ALBYT



LOC  NXT  * SOURCE MODE 7 (INDEXED DEFERRED) GET SOURCE DATA
        / GET TO S7=1 FROM F=5 VIA BUT IR DECODE IR<11:9>=7
217  032  S7=1  BA←PC; DATI(MUST BE AN  EVEN ADDRESS HERE)
032  033  S7=2  B←PC+2
033  034  S7=3  PC←B; CKOFF
034  035  S7=4  B←UNIBUS DATA
035  134  S7=5  BA←B+R[S]; DATI(MUST BE AN EVEN ADDRES) ; CKOFF; GOTO S3=4
```



```
LOC  NXT  * SOURCE BYTE ODD
        / GETE TO SBO=1 FROM S1=2 VIA BUT BYTE (BYTE INST, AND SOURCE DATA ODD ADDR)
067  346  SBO=1 SHIFT B RIGHT; F SHIFT
346  324  SBO=2 SHIFT B RIGHT; F SHIFT
324  340  SBO=3 SHIFT B RIGHT; F SHIFT
340  361  SBO=4 SHIFT B RIGHT; F SHIFT
361  050  SBO=5 SHIFT B RIGHT; F SHIFT
050  020  SBO=6 SHFIT B RIGHT; F SHIFT
020  052  SBO=7 SHIFT B RIGHT; F SHIFT
052  047  SBO=8 SHIFT B RIGHT; GOTO SBE=1



LOC  NXT  * SOURCE EVEN BYTE
        / GET TO SBE=1 FROM SBO=8 VIA GOTO
        / GET TO SBE=1 FROM S1=2 VIA BUT BYTE, (BYTE INST AND SOURCE DATA EVEN ADDR)
        / GET TO SBE=1 FROM S0=1 VIA BUT BYTE, (BYTE INST,)
047  001  SBE=1 R[10]←B SEX) BUT DESTINATION
        / IF IF<5:3>  =0 GOTO D0=1
        /    "              =1  "   D1=1
        /    "              =2  "   D2=1
        /    "              =3  "   D3=1
        /    "              =4  "   D4=1
        /    "              =5  "   D5=1
        /    "              =6  "   D6=1
        /    "              =7  "   D7=1



LOC  NXT  * DEST, MODE 0 (REGISTER), GET DEST DATA, OP, AND REPLACE
        / GET TO D0=1 FROM S0=2 VIA BUT DESTINATION (IR<5:3>=0)
        / GET TO D0=1 FROM SBE=1 VIA BUT DESTINATION (IR<5:3>=0)
101  154  D0=1  B←R[D]; BUT MOVE
        / IF INST=MOVE,BAR (OTHER THAN MOVE) AND BYTE GOTO DB0=1
        / IF INST=MOVE AND BYTE GOTO MB=0
        / IF INST=MOVE AND BYTE,BAR GOTO D0=3A
        / IF INST=MOVE,BAR AND BYTE,BAR FALL THROUGH TO D0=2
157  142  D0=2  R[11]←B; BUT UNARY
        / IF INST=JMP OR JSR GOTO ERT=1 (ILLEGAL INST, TRAP)
        / IF INST=SWAB GOTO SB1=1
        / IF INST=OTHER UNARY(CLR,COM,INC,DEC,NEG,ADC,SBC,TST,ROR,ROL,ASR,ASL) GOTO U1=1
        / GET TO D0=3 FROM U1=1 VIA GOTO
        / GET TO D0=3 FROM D0=1 VIA BUT BYTE (INST=MOVE AND BYTE',BAR)
```

```
162  332  D0=3  B←R[10] OP B; BUT NONMOD
          / SEE DESCRIPTION OF AUXILLARY ALU CONTROL (AUX CONTROL)
          / FOR MORE DETAILS ON WHAT 'OP' ACCOMPLISHES
          / THERE EXISTS A D03=A WHICH IS IDENTICAL TO D0=3 EXCEPT LOC=155
          / GET TO D0=3A FROM SB1=8 VIA GOTO
          / IF NONMOD GOTO B2=2 (BUT SERVICE)
          / IF NOT NONMOD FALL THROUGH TO D0=4
          / GET TO D0=4 FROM R1=6 VIA GOTO
332  040  D0=4  R[D]←B; BUT SERVICE
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO ERT1A
          / IF POWERFAIL GOTO PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
          / IF BR4 GOTO BG=1
          / IF UATR RECEIVE GOTO URTR
          / IF UART TRANSMIT GOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE GOTO F=1



LOC  NXT  * DEST, MODE 1 (REG,DEFERRED) GET DEST DATA, OP, AND REPLACE
          / GET TO D1=1 FROM S0=2 VIA BUT DESTINATION (IR<5:3>=1)
          / GET TO D1=1 FROM SBE=1 VIA BUT DESTINATION (IR<5:3>=1)
103  200  D1=1  B,BA←R[D]; DATIP; BUT JSRMP; ALBYT; CKOFF
          / NOTE DATA IN PAUSE HERE
          / IF INST=JMP GOTO J1=1
          / IF INST=JSR GOTO J2=1
          / IF INST NOT JMP OR JSR FALL THROUGH TO D1=2
          / GET DO D1=2 FROM D2=3 VIA GOTO
          / GET TO D1=2 FROM D3=5 VIA GOTO
          / GET TO D1=2 FROM D6=5 VIA GOTO
200  210  D1=2  B←UNIBUS DATA; BUT BYTE
          / IF ODD BYTE GOTO D0=1
          / IF EVEN BYTE GO TO DE=1
          / IF NOT BYTE FALL THROUGH TO D1=3
210  143  D1=3  R[11]←B; BUT UNARY
          / IF INST=SWAB GOTO SB2=1
          / IF INST=OTHER UNARY (CLR, COM,INC,DEC,NEG,ADC, SBC,TST,ROR,ROL,ASR,ASL) GOTO U2=1
          / GET TO D1=4 FROM DE=1 VIA BUT UNARY (NON UNARY)
          / GET TO D1=4 FROM U2=1 VIA GOTO
          / GET TO D1=4 FROM SB2=8 VIA GOTO
163  334  D1=4  B←R[10] OP B; BUT NONMOD
          / SEE DESCRIPTION OF AUXILLARY ALU CONTROL (AUX CONROL)
          / FOR MORE DETAILS ON WHAT 'OP' ACCOMPLISHES
```



```
          / IF NONMOD GOTO B2-2 (BUT SERVICE)
          / IF NOT NONMOD FALL THROUGH TO D1-5
334  065  D1-5  DATO; ALBYT; CKOFF
          / GET TO D1-6 FROM DD-18 VIA GOTO
065  305  D1-6  DRIVERS←B; GOTO B2-2 (BUT SERVICE)



LOC  NXT  * DEST MODE 2 (AUTO-INC) GET DEST DATA, OP AND REPLACE
          / GET TO D2-1 FROM S0-2 VIA BUT DESTINATION (IR<5:3>=2)
          / GET TO D2-1 FROM SBE-1 VIA BUT DESTINATION (IR<5:3>=2)
105  331  D2-1  BA←R[D]; DATIP; ALBYT
          / NOTE DATA IN PAUSE HERE
331  341  D2-2  B←R[D]+1+BYTE,BAR
          / GET TO D2-3 FROM D4-1 VIA GOTO
341  200  D2-3  R[D]←B; BUT JSRMP; GOTO D1-2; CKOFF
          / IF INST=JMP GOTO J1-1
          / IF INST=JSR GOTO J2-1
          / IF INST NOT JMP OR JSR FALL THROUGH TO D1=2



LOC  NXT  * DEST MODE 3 (AUTO-INC DEFERRED) GET DEST DATA, OP AND REPLACE
          / GET TO D3-1 FROM S0-2 VIA BUT DESDTINATION (IR<5:3>=3)
          / GET TO D3-1 FROM SBE-1 VIA BUT DESTINATION (IR<5:3>=3)
107  160  D3-1  BA←R[D]; DATI
160  070  D3-2  B←R[D]+2
          / GET TO D3-3 FROM D5-1 VIA GOTO
070  071  D3-3  R[D]←B; CKOFF
          / GET TO D3-4 FROM D7-5 VIA GOTO
071  072  D3-4  B←UNIBUS DATA
072  200  D3-5  BA←B; DATIP; BUT JSRMP; GOTO D1-2; ALBYT; CKOFF
          / NOTE DATA IN PAUSE HERE
          / IF INST=JMP GOTO J1-1
          / IF INST=JSR GOTO J2-1
          / IF INST NOT JMP OR JSR FALL THROUGH TO D1=2



LOC  NXT  * DEST MODE 4(AUTO-DEC) GET DEST DATA, OP AND REPLACE
          / GET TO S4-1 FROM S0-2 VIA BUT DESTINATRON (IR<5:3>=4)
          / GET TO S4-1 FROM SBE-1 VIA BUT DESTINATION (IR<5:3>=4)
111  341  D4-1  B,BA←R[D]-1-BYTE,BAR; DATIP; ENABOVER; GOTO D2=3; ALBYT
```

```
LOC  NXT  * DEST MODE 5 (AUTO-DEC DEFERRED) GET DEST DATA, OP, AND REPLACE
          / GET TO D5=1 FROM S0=2 VIA BUT DESTINATION (IR<5:3>=5)
          / GET TO D5=1 FROM SBE=1 VIA BUT DESTINATION (IR<5:3>=5)
113  070  D5=1  B,BA←RED]=2; DATI; ENABOVER; GOTO D3=3
```

```
LOC  NXT  * DEST MODE 6 (INDEXED) GET DTA,OP, AND REPLACE
          / GET TO D6=1 FROM S0=2 VIA BUT DESTINATION (IR<5:3>=6)
          / GET TO D6=1 FROM SBE=1 VIA BUT DESTINAITON (IR<5:2>=6)
115  075  D6=1  BA←PC; DATI
075  077  D6=2  B←PC+2
077  057  D6=3  PC←B; CKOFF
057  300  D6=4  B←UNIBUS DATA
300  200  D6=5  B,BA←B+RED]; DATIP; BUT JSRMP; GOTO D1=2; ALBYT; CKOFF
          / NOTE DATA IN PUASE HERE
          / IF INST=JMP GOTO J1=1
          / IF INST=JSR GOTO J2=1
          / IF INST NOT JMP OR JSR FALL THROUGH TO D1=2
```

```
LOC  NXT  * DEST MODE 7 (INDEXED DEFERRED) GET DEST DATA,OP, AND REPLACE
          / GET TO D7=1 FROM S0=2 VIA BUT DESTINATION (IR<5:3>=7)
          / GET TO D7=1 FROM SBE=1 VIA BUT DESTINATION (IR<5:3>=7)
117  310  D7=1  BA←PC; DATI
310  104  D7=2  B←PC+2
104  320  D7=3  PC←B; CKOFF
320  106  D7=4  B←UNIBUS DATA
106  071  D7=5  BA←B+RED]; DATI; CKOFF; GOTO D3=4
```

```
LOC  NXT  * DESTINATION MODE 0, BYTE
          / GET TO DB0=1 FROM D0=1 VIA BUT BYTE (BYTE INST AND MOVE,BAR)
156  144  DB0=1 R[11],B←B SEX; BUT UNARY
          / IF UNARY OTHER THAN JSR, JMP, OR SWAB (CLR,COM,INC,DEC,NEG,ADC,SBC,TST,ROR,ROL,ASR,ASL) GOTO U3=1
```



```
          / IF NOT UNARY FALL THROUGH TO DB0=2
164  304  DB0=2 B←R[10] OP B; BUT NONMOD
          / SEE DESCRIPTION OF AUXILLARY ALU CONROL (AUX CONTROL)
          / FOR MORE DETAILS ON WHAT 'OP' ACCOMPLISHES
          / IF NONMOD GOTO B2=2 (SERVICE)
          / IF NOT NONMOD FALL THRU TO DB0=3
304  040  DB0=3 R[D]<7:0>←B; BUT SERVICE; GOTO F=1
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO ERT1A
          / IF POWER FAIL GOTO PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
          / IF BR4 GOTO BG=1
          / IF UART RECEIVE GOTO URTR
          / IF UART TRANSMIT GOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE GOTO F=1
```

```
LOC  NXT  * DESTINATION ODD BYTE
          / GET TO DO=1 FROM D1=2 VIA BUT BYTE (BYTE INST AND ODD ADDR)
270  123  DO=1  SHIFT B RIGHT; F SHIFT
123  124  DO=2  SHIFT B RIGHT; F SHIFT
124  125  DO=3  SHIFT B RIGHT; F SHIFT
125  126  DO=4  SHIFT B RIGHT; F SHIFT
126  127  DO=5  SHIFT B RIGHT; F SHIFT
127  130  DO=6  SHIFT B RIGHT; F SHIFT
130  131  DO=7  SHIFT B RIGHT; F SHIFT
131  132  DO=8  SHIFT B RIGHT
132  145  DO=9  R[11],B←B SEX; BUT UNARY
          / IF UNARY OTHER THAN JSR, JMP, OR SWAB (CLR,COM,INC,DEC,NEG,ADC,SBC,TST,ROR,ROL,ASR,ASL) GOTO U4=1
          / IF NOT UNARY FALL THROUGH TO DO=10
165  342  DO=10 B←R[10] OP B; BUT NONMOD
          / SEE DESCRIPTION OF AUXILLARY ALU CONTROL (AUX CONROL)
          / FOR MORE DETAILS ON WHAT 'OP' ACCOMPLISHES
          / IF NONMOD GOTO B2=2 (BUT SERVICE)
          / IF NOT NONMOD FALL THROUGH TO DO=11
342  135  DO=11 SHIFT B LEFT; F SHIFT
135  136  DO=12 SHIFT B LEFT; F SHIFT
136  137  DO=13 SHIFT B LEFT; F SHIFT
137  140  DO=14 SHIFT B LEFT; F SHIFT
140  141  DO=15 SHIFT B LEFT; F SHIFT
141  142  DO=16 SHIFT B LEFT; F SHIFT
142  143  DO=17 SHIFT B LEFT; F SHIFT
143  065  DO=18 SHIFT B LEFT; DATO; CKOFF; GOTO D1=6; ALBYT
```

```
LOC  NXT  * DESTINATION EVEN BYTE
          / GET TO DE=1 FROM D1=2 VIA BUT BYTE (BYTE INST AND EVEN ADDR)
250  163  DE=1  R[11]=B SEX; GOTO D1=4; BUT UNARY
          / IF UNARY OTHER THAN JSR,JMP, OR SWAB (CLR,COM,INC,DEC,ADC,SBC,TST,ROR,ASR,ASL) GOTO U5=1
          / IF NOT UNARY FALL THROUGH TO D1=4


LOC  NXT  * UNARY OPERATORS GET SINGLE OPERAND IN B AND R[10]
          / CKOFF IN EACH OF THE FOLLOWING (U1=1, U2=1, U3=1, U4=1, AND U5=1)
          / GIVES THE AUX CONTROL SUFFICIENT TIME TO DO ITS THING,
          / THAT IS,, REMAIN IN CURRENT STATE (MICRO STEP) FOR TWO
          / PROCESSOR CKOCK PERIODS SO THAT THE CONDITION CODE LOGIC
          / HAS SUFFICIENT TIME TO SETTLE,
          / GET TO U1=1 FROM D0=2 VIA BUT UNARY (INST=CLR,COM,INC,DEC,NEG,ADC,SBC,TST,ROR,ROL,ASR,ASL)
352  162  U1=1  R[10]=B; CKOFF; GOTO D0=3
          / GET TO U2=1 FROM D1=3 VIA BUT UNARY (INST=CLR,COM,,,,ASL) SEE U1=1
353  163  U2=1  R[10]=B; CKOFF; GOTO D1=4
          / GET TO U3=1 FROM DB0=1 VIA BUT UNARY (INST=CLR,COM,,,,ASL) SEE U1=1
354  164  U3=1  R[10]=B; CKOFF; GOTO DB0=2
          / GET TO U4=1 FROM D0=9 VIA BUT UNARY (INST=CLR,COM,,,,ASL) SEE U1=1
355  165  U4=1  R[10]=B; CKOFF; GOTO D0=10
          / GET TO U5=1 FROM DE=1 VIA BUT UNARY (INST=CLR,COM,,,,ASL) SEE U1=1
373  163  U5=1  R[10]=B; CKOFF; GOTO D1=4


LOC  NXT  * MOVB INST
          / GET TO MB=0 FROM D0=1 VIA BUT MOVE (INST=MOVE AND BYTE)
154  240  MB=0  CKOFF
          / CKOFF IN MB=0 GIVES THE AUX CONTROL SUFFICIENT TIME TO DO ITS THING,
          / THAT IS,, REMAIN IN CURRENT STATE (MICRO STEP) FOR TWO
          / PROCESSOR CLOCK PERIODS SO THAT THE CONDITION CODE LOGIC
          / HAS SUFFICIENT TIME TO SETTLE,
240  152  MB=1  B=R[10]
152  040  MB=2  R[0]=B SEX; BUT SERVICE
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO ERT1A
          / IF POWER FAIL GOTO PF=1
```



```
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
          / IF BG4 GOTO BG=1
          / IF UART RECEIVE GOTO URTR
          / IF UART TRANSMIT GOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE GOTO F=1


LOC  NXT  * BRANCH, CHANGE PC
015  147  B=1   SHIFT B LEFT
147  146  B=2   A=PC+B
146  040  B=3   PC=B; BUT SERVICE
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO ERT1A
          / IF POWER FAIL GOTO  PF=1
          / IF BR7 GOTO BG=1
          / IF BR6  GOTO BG=1
          / IF INTERNAL LINE CLOCK GOT LC=1
          / IF BR5 GOTO BG=1
          / IF BR4 GOTO BG=1
          / IF UART RECEIVE GOTO URTR
          / IF UART TRANSMIT GOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE GOTO F=1


LOC  NXT  * CONDITION CODE MASK (FOR BOTH SET AND CLEAR)
151  350  CCM=1 A=B AND K[17]
350  112  CCM=2 BUT DEST
          / IF INST= SET, GO TO SC=1
          / IF INST= CLEAR, GOTO CC=1


LOC  NXT  * CLEAR CONDITION CODES
112  040  CC=1  PSW=PSW AND (B',BAR); BUT SERVICE
          / THIS EFFECTIVELY CLEARS THOSE BITS OF THE PSW WHICH ARE SET
```

```
        / IN THE B REG, B,BAR IS B REGISTER COMPLEMENTED,
        / PRIORITIES ARE LISTED HIGHEST TO LOWEST
        / IF T BIT BRAP GOTO BT=1
        / IF STACK OVERFLOW GOTO ERT1A
        / IF POWER FAIL GOTO PF=1
        / IF BR7 GOTO BG=1
        / IF BR6 GOTO BG=1
        / IF INTERNAL LINE CLOCK GOTO LC=1
        / IF BR5 GOTO BG=1
        / IF BR4 GOTO BG=1
        / IF UART RECEIVE GOTO URTR
        / IF UART TRNASMIT GOTO URTX
        / IF CONSOLE STOP GOTO H=1
        / IF NONE OF THE ABOVE GOTO F=1



LOC  NXT  * SET CONDITION CODES
116  040  SC=1  PSW←PSW OR BI BUT SERVICE
        / PRIORITIES ARE LISTED HIGHEST TO LOWEST
        / IF T BIT TRAP GOTO BT=1
        / IF STACK OVERFLOW GOTO ERT1A
        / IF POWER FAIL GOTO PF=1
        / IF BR7 GOTO BG=1
        / IF BR6 GOTO BG=1
        / IF INTERNAL LINE CLOCK GOTO LC=1
        / IF BR5 GOTO BG=1
        / IF BR4 GOTO BG=1
        / IF UART RECEIVE GOTO URTR
        / IF UART TRANSMIT GOTO URTX
        / IF CONSOLE STOP GOTO H=1
        / IF NONE OF THE ABOVE GOTO F=1



LOC  NXT  * SWAB, MODE Ø
        / GET TO SB1=1 FROM D0=2 VIA BUT UNARY (INST=SWAB AND MODE=Ø)
        / ROTATE LEFT ACCOMPLISHED VIA ASR
166  172  SB1=1 ROTATE B LEFT; F SHIFT
172  173  SB1=2 ROTATE B LEFT; F SHIFT
173  174  SB1=3 ROTATE B LEFT; F SHIFT
174  144  SB1=4 ROTATE B LEFT; F SHIFT
144  176  SB1=5 ROTATE B LEFT; F SHIFT
176  177  SB1=6 ROTATE B LEFT; F SHIFT
177  006  SB1=7 ROTATE B LEFT; F SHIFT
006  155  SB1=8 ROTATE B LEFT; GOTO D0=3A
```



```
LOC  NXT  * SWAB, NOT MODE Ø
        / GET TO SB2=1 FROM D1=3 VIA BUT UNARY (INST=SWAB)
        / ROTATE LEFT ACCOMPLISHED VIA ASR
167  012  SB2=1 ROTATE B LEFT; F SHIFT
012  220  SB2=2 ROTATE B LEFT; F SHIFT
220  022  SB2=3 ROTATE B LEFT; F SHIFT
022  023  SB2=4 ROTATE B LEFT; F SHIFT
023  024  SB2=5 ROTATE B LEFT; F SHIFT
024  031  SB2=6 ROTATE B LEFT; F SHIFT
031  330  SB2=7 ROTATE B LEFT; F SHIFT
330  163  SB2=8 ROTATE B LEFT; GOTO D1=4



LOC  NXT  * JMP
        / GET TO J1=1 FROM D1=1 VIA BUT JSRMP (INST=JMP)
        / GET TO J1=1 FROM D2=3 VIA BUT JSRMP (INST=JMP)
        / GET TO J1=1 FROM D3=5 VIA BUT JSRMP (INST=JMP)
        / GET TO J1=1 FROM D6=5 VIA BUT JSRMP (INST=JMP)
204  260  J1=1  NOP
        / J1=1 MUST BE A NOP BECAUSE FOLLOWING A CKOFF, THE AMX WILL
        / BE FORCED TO TAKE DATA FROM THE UNIBUS,
260  040  J1=2  PC←BI BUT SERVICE
        / PRIORITIES ARE LISTED HIGHEST TO LOWEST
        / IF T BIT TRAP GOTO BT=1
        / IF STACK OVERFLOW GOTO ERT1A
        / IF POWER FAIL GOTO PF=1
        / IF BR7 GOTO BG=1
        / IF BR6 GOTO BG=1
        / IF INTERNAL LINE CLOCK GOTO LC=1
        / IF BR5 GOTO BG=1
        / IF BR4 GOTO BG=1
        / IF UART RECEIVE GOTO URTR
        / IF UART TRANSMIT GOTO URTX
        / IF CONSOLE STOP GOTO H=1
        / IF NONE OF THE ABOVE GOTO F=1
```

```
LOC  NXT  * JSR
          / GET TO J2=1 FROM D1=1 VIA BUT JSRMP (INST=JSR)
          / GET TO J2=1 FROM D2=3 VIA BUT JSRMP (INST=JSR)
          / GET TO J2=1 FROM D3=5 VIA BUT JSRMP (INST=JSR)
          / GET TO J2=1 FROM D6=4 VIA BUT JSRMP (INST=JSR)
212  261  J2=1  NOP
          / J2=1 MUST BE A NOP BECAUSE FOLLOWING A CKOFF, THE AMX WILL BE
          / FORCED TO TAKE DATA FROM THE UNIBUS,
261  262  J2=1A R[11]=B
262  214  J2=2  B,BA=R[6]=2; ENABOVER
214  206  J2=3  R[6]=B; CKOFF; DATO
206  216  J2=4  DRIVERS=R[S]
216  263  J2=5  B=PC
263  264  J2=6  R[S]=B
264  265  J2=7  B=R[11]
265  040  J2=8  PC=B; BUT SERVICE
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOT ERT1A
          / IF POWER FALIL GOTO PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
          / IF BR4 GOTO BG=1
          / IF UART RECEIVE GOTO URTR
          / IF UART TRANSMIT GOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE GOTO F=1



LOC  NXT  * RTS
          / GET TO R1=1 FROM F=5 VIA BUT IR DECODE (INST=RTS)
005  221  R1=1  BA=R[6]; DATI
221  222  R1=2  B=R[6]+2
222  223  R1=3  R[6]=B
223  224  R1=4  B=R[0]
224  225  R1=5  PC=B; CKOFF
225  332  R1=6  B=UNIBUS DATA; GOTO B0=4



LOC  NXT  * RTI
          / GET TO R2=2 FROM F=5 VIA BUT IR DECODE (INST=RTI)
227  230  R2=1  BA=R[6]; DATI
230  231  R2=2  B=R[6]+2
```



```
231  232  R2=3  R[6]=B; CKOFF
232  234  R2=4  PC=UNIBUS DATA
          / THERE IS NO R2=5 (ANY MORE)
234  235  R2=6  BA=R[6]; DATI
235  236  R2=7  B=R[6]+2
236  237  R2=8  R[6]=B; CKOFF
237  305  R2=9  PS=UNIBUS DATA; GOTO B2=2 (BUT SERVICE)



LOC  NXT  * WAIT
          / GET TO W=1 FROM F=5 VIA BUT IR DECODE (INST=WAIT)
          / GET TO W=1 FROM W=1 VIA GOTO IF BUT SERVICE IS FALSE
063  040  W=1   BUT SERVICE
          / THE MICRO PROGRAM WILL LOOP ON W=1 UNTIL SOME HIGHER
          / PRIORITY CONDITION IS RECOGNIZED BY THE 'BUT SERVICE' ROM SEE F191 ON
          / THE CONE PRINT,
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO ERT1A
          / IF POWER FAIL GOT PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
          / IF BR4 GOTO BG=1
          / IF UART RECEIVE URTR
          / IF UART TRANSMIT TOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE TOTO F=1



LOC  NXT  * HALT
          / GET TO H=1 FROM F=5 VIA BUT IR DECODE (INST=HALT)
          / GET TO H=1 FROM BUT SERVICE
041  302  H=1   B=PC
          / DISPLAY PC IN LIGHTS BY PUTTING IT INTO B
          / GET TO H=2 FROM CE1=3 VIA GOTO
          / GET TO H=2 FROM CD1=5 VIA GOTO
          / GET TO H=2 FROM CL=3 VIA GOTO
302  300  H=2   BA=R[17]; BUT SWITCH
          / THE BA IS LOADED HERE SO THAT THE ADDRESS WILL BE INCREMENTED BY +1 WHEN EXAMINING (DEPOSITING INT
          / AND BY +2 WHEN EXAMINING (DEPOSITING INTO) SUCCESSIVE CORE MEMORY,
          / IF START DEPRESSED GOTO CS=1
          / IF CONTINUE DEPRESSED GOTO CCS=1
```

```
        / IF EXAMINE (1 ST) GOTO CE1=1

        / IF EXAMINE (NOT 1 ST) GOTO CE2=1
        / IF DEPOSIT (1 ST) GOTO CD1=1
        / IF DEPOSIT (NOT 1 ST) GOT CD2=1
        / IF LOAD GOTO CL=1
        / IF NO SWITCHES ARE DEPRESSED LOOP ON H=2



LOC  NXT  * EMT TRAP (VECTOR LOC=30)
          / GET TO ET=1 FROM F=5 VIA BUT IR DECODE (INST=EMT)
011  245  ET=1  B=K[30]
          / GET TO ET=2 FROM BT=1 VIA GOTO
          / GET TO ET=2 FROM IT=1 VIA GOTO
          / GET TO ET=2 FROM T=1 VIA GOTO
          / GET TO ET=1 FROM RT=1 VIA GOTO
          / GET TO ET=2 FROM ERT=1 VIA GOTO
          / GET TO ET=2 FROM PF=1 VIA GOTO
245  246  ET=2  R[12]=B
246  247  ET=3  B,BA=R[6]=2; ENABOVER
          / ET=4 HAS BEEN ELIMINATED
247  226  ET=5  R[6]=B; CKOFF; DATO
226  251  ET=6  DIRVERS=PS
251  252  ET=7  B,BA=R[6]=2; ENABOVER
252  253  ET=8  R[6]=B; CKOFF; DATO
253  254  ET=9  DIRVERS=PC
254  255  ET=10 BA=R[12]; DATI; CKOFF
255  256  ET=11 PC=UNIBUS DATA
256  257  ET=12 BA=R[12]+2; DATI; CKOFF
257  305  ET=13 PS=UNIBUS DATA;  GOTO B2=2 (SERVICE)



LOC  NXT  * BREAKPOINT TRAP (VECTOR LOC=14) AND T BIT TRACE TRAP
          / GET TO BT=1 FROM ALL BUT SERVICE
          / GET TO BT=1 FROM F=5 VIA BUT IR DECODE (INST=BREAKPOINT)
045  245  BT=1  B=K[14]; GOTO ET=2



LOC  NXT  * IOT (VECTOR LOC=20)
          / GET TO IT=1 FROM F=5 VIA BUT IR DECODE (INST=IOT
273  245  IT=1  B=K[20]; GOTO ET=2
```



```
LOC  NXT  * TRAP (VECTOR LOC=34)
          / GET TO T=1 FROM F=5 VIA BUT IR DECODE (INST=TRAP)
021  245  T=1   B=K[34]; GOTO ET=2



LOC  NXT  * RESERVED INST TRAP (VECTOR LOC=10)
          / GET TO RT=1 FROM F=5 VIA BUT IR DECODE (INST=NON VALID)
001  245  RT=1  B=K[10]; GOTO ET=2



LOC  NXT  * ERROR TRAP (BUS ERROR, STACK OVERFLOW, ILLEGAL INST) VECTOR LOC=4
          / THERE EXISTS ERT=1 (LOC=10) FOR BUS ERROR
          / THERE ALSO EXISTS ERT1A (LOC=46) FOR STACK OVERFLOW
          / ERT1A GOES TO ET2=2, A SEQUENCE WHICH DOESN'T HAVE THE
          / ENABOVER,  WE DON'T WANT TO LOOK FOR STACK OVERFLOW WHILE
          / DOING THE STACK OVERFLOW TRAP;  THE ET2=2 SEQUENCE REJOINS THE ET SEQUENCE AT ET=8
          / THERE ALSO EXISTS ERT1B (LOC=153) FOR ILLEGAL INST (JSR OR JMP, MODE 0)
010  245  ERT=1 B=K[4]; GOTO ET=2



LOC  NXT  * CONSOLE START SWITCH
          / GET TO CS=1 FOLLOWING RELEASE OF START SWITCH,
100  322  CS=1  IR=ZERO
          / CLOCKING THE IR TURNS ON THE RUN LIGHT
322  321  CS=2  BA,B=R[17]
321  040  CS=3  PC=B; BUT SERVICE
          / PRIOIRTIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT BRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO ERT1A
          / IF POWER FAIL GOTO PF=1
          / IF BR7 GOTO BG=1
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
```

```
        / IF BR4 GOTO BG=1
        / IF UART RECEIVE GOTO URTR
        / IF UART TRANSMIT GOTO URTX
        / IF CONSOLE STOP GOTO H=1
        / IF NONE OF THE ABOVE GOTO F=1



LOC  NXT  * CONSOLE EXAMINE SWITCH= FIRST TIME IN SEQUENCE (DON'T INC R[17])
        / GET TO CE1=1 FROM H=2 VIA BUT SWITCH
        / GET TO CE1=1 FROM CE2=2 VIA GOTO
317  307  CE1=1 BA,B=R[17]; BUT SWITCH
        / DISPLAY ADDRESS BY PUTTING INTO THE B REGISTER WHILE EXAMINE IS DOWN
        / LOOP ON CE1=1 UNTIL SWITCH IS RELEASED
307  326  CE1=2 DATI; CKOFF
326  302  CE1=3 B=UNIBUS DATA; GOTO H=2



LOC  NXT  * CONSOLE EXAMINE SWITCH = OTHER THAN FIRST IN SEQUENCE (INC R[17])
        / GET TO CE2=1 FROM H=2 VIA BUT SWITCH
315  371  CE2=1 B=R[17]+2
        / R[17] IS IN BA FROM H=2, THIS WILL CAUSE +2 TO BECOME +1 WHEN EXAMINING REGISTERS;
371  317  CE2=2 R[17]=B; GOTO CE1=1



LOC  NXT  * CONSOLE DEPOSIT SWITCH = FIRST TIME IN SEQUENCE (DON'T INC R[17])
        / GET TO CD1=1 FROM H=2 VIA BUT SWITCH
        / GET TO CD1=1 FROM CD2=2 VIA GOTO
313  303  CD1=1 B=R[17]; BUT SWITCH
        / LOOP ON CD1=1 UNTIL DEPOSIT SWITCH IS RELEASED
303  374  CD1=2 BA=K[207],BAR; DATI; CKOFF
        / COMPLEMENT OF 207 = 177570 = SWITCH REGISTER ADDRESS
374  314  CD1=3 B=UNIBUS DATA
314  372  CD1=4 BA=R[17]; DATO; CKOFF
372  302  CD1=5 DRIVERS=B; GOTO H=2
```



```
LOC  NXT  * CONSOLE DEPOSIT SWITCH = OTHER THAN FIRST IN SEQENCE (INC R[17])
        / GET TO CD2=1 FROM H=3) VIA BUT SWITCH
312  337  CD2=1 B=R[17]+2
        / R[17] IS IN BA, THIS WILL CAUSE +2 TO BECOME +1 WHEN DEPOSITING INTO REGISTERS
337  313  CD2=2 R[17]=B; GOTO CD1=1



LOC  NXT  * CONSOLE CONTINUE SWITCH
        / GET TO CCS=1 FROM H=2 VIA BUT SWITCH
316  276  CCS=1 B=PC
276  270  CCS=2 BUT SWITCH
272  062  CCS=3 IR=ZERO; GOTO F=1
        / CLOCKING THE IR TURNS ON THE RUN LIGHT



LOC  NXT  * CONSOLE LOAD SWITCH
        / GET TO CL=1 FROM H=2 VIA BUT SWITCH
311  375  CL=1  BA=K[207],BAR; DATI; CKOFF
        / COMPLEMENT OF 207 = 177570 = SWITCH REGISTER ADDRSS
375  367  CL=2  B=UNIBUS DATA
367  302  CL=3  R[17]=B; GOTO H=2
        / CL=3 GOES TO H=2 VIA GOTO, IF LOAD IS STILL DEPRESSED, THE BUT
        / SWITCH IN H=2 WILL TAKE US BACK TO CL=1,  THUS, AS LONG AS LOAD IS
        / DEPPRESSED, CHANGES IN THE SWITCHES WILL SHOW UP IN THE B REG (LIGHTS) AND IN R[17].



LOC  NXT  * POWER FAIL (VECTOR LOC=24)
        / GET TO PF=1 FROM SERVICE
043  245  PF=1  B=K[24]; GOTO ET=2



LOC  NXT  * RESTART FROM POWER FAIL (VECTOR LOC=24)
        / GET TO RS=1 MYSTERIOUSLY AS POWER COMES UP ( NXT CHIPS, F092 AND F103 SHOWN ON THE CONF PRINT,
        / ARE DISABLED FORCING THE MICROPROGRAM TO RS=1 IN LOC 0;
000  241  RS=1  BA=K[24]; DATI
241  347  RS=1A CKOFF
```

```
          / MUST DO CKOFF IN RS=1A BECAUSE OF CONFLICT BETWEEN
          / CKOFF AND INIT CREATED BY CKOFF ASSOCIATED WITH AUX CONTROL
347  074  RS=2  PC=UNIBUS DATA
074  351  RS=3  BA=K[24]+2; DAT[]; CKOFF
351  305  RS=4  PS=UNIBUS DATA; GOTO B2=2 (SERVICE)



LOC  NXT  * INTERRUPT SERVICING
          / GET TO INT=1 FROM BG=2 VIA BUT INT (TRUE)
325  246  INT=1 R[12]=UNIBUS DATA; SET SLAVESYNC; GOTO ET=3



LOC  NXT  * BUS GRANT SERVICE
          / GET TO BG=1 FROM BUT SERVICE
040  305  BG=1  BUT INTERRUPT; GOTO B2=2 (BUT SERVICE)
          / IF INTERRUPT GOTO INT=1
          / IF NO INTERRUPT FALL THROUGH TO B2=2



LOC  NXT  * NOP = BRANCH CONDITION NOT TRUE (PC UNCHANGED)
          / B2=1 HAS BEEN ELIMINATED BECAUSE NEWI IS NO LONGER
          / GET TO B2=2A FROM D0=3 VIA BUT NONMOD (TRUE)
          / GET TO B2=2B FROM D1=4 VIA BUT NONMOD (TRUE)
          / GET TO B2=2C FROM D0=10 VIA BUT NONMOD (TRUE)
          / GET TO B2=2D FROM F=5 VIA BUT IR DECODE, BRANCH INST, CONDITION NOT TRUE
          / GET TO B2=2 FROM RST=1 VIA GOTO
          / GET TO B2=2 FROM D0=4 VIA GOTO
          / GET TO B2=2 FROM DB0=2  VIA BUT NONMOD (TRUE)
          / GET TO B2=2 FROM MB=2 VIA GOTO
          / GET TO B2=2 FROM CC=1 VIA GOTO
          / GET TO B2=2 FROM SC=1 VIA GOTO
          / GET TO B2=2 FROM J2=8 VIA GOTO
          / GET TO B2=2 FROM RS=10 VIA GOTO
          / GET TO B2=2 FROM ET=13 VIA GOTO
305  040  B2=2  BUT SERVICE
          / PRIORITIES ARE LISTED HIGHEST TO LOWEST
          / IF T BIT TRAP GOTO BT=1
          / IF STACK OVERFLOW GOTO ERTSA
          / IF POWER FAIL GOTO PF=1
          / IF BR7 GOTO BG=1
```



```
          / IF BR6 GOTO BG=1
          / IF INTERNAL LINE CLOCK GOTO LC=1
          / IF BR5 GOTO BG=1
          / IF BR4 GOTO BG=1
          / IF UART RECEIVE GOTO URTR
          / IF UART TRANSMIT GOTO URTX
          / IF CONSOLE STOP GOTO H=1
          / IF NONE OF THE ABOVE GOTO F=1



LOC  NXT  * RESET
          / GET TO RST=1 FROM F=5 VIA BUT IR DECODE (INST=RESET)
357  305  RST=1 BUT INIT; CKOFF; GOTO B2=2 (BUT SERVICE)



LOC  NXT  * DOUBLE BUS ERROR, GOTO HALT
110  041  DBE=1 NOP; GOTO H=1



LOC  NXT  * UART XMIT (VECTOR LOC 64)
060  245  URTX  B=K[64]; GOTO ET=2



LOC  NXT  * UART RECEIVE (VECTOR LOC 60)
064  245  URTR  B=K[60]; GOTO ET=2



LOC  NXT  * LINE CLOCK (VECTOR LOC 100)
042  245  LC=1  B=K[100]; GOTO ET=2
```

ERT1A NOT EXPLICITLY SHOWN IN FLOW
D0-3A NOT EXPLICITLY SHOWN IN FLOW
A145 NOT EXPLICITLY SHOWN IN FLOW
ET2-2 NOT EXPLICITLY SHOWN IN FLOW
ET2-3 NOT EXPLICITLY SHOWN IN FLOW
ET2-5 NOT EXPLICITLY SHOWN IN FLOW
ET2-6 NOT EXPLICITLY SHOWN IN FLOW
ET2-7 NOT EXPLICITLY SHOWN IN FLOW
ERT1B NOT EXPLICITLY SHOWN IN FLOW
B2-2A NOT EXPLICITLY SHOWN IN FLOW
B2-2B NOT EXPLICITLY SHOWN IN FLOW
B2-2C NOT EXPLICITLY SHOWN IN FLOW
B2-2D NOT EXPLICITLY SHOWN IN FLOW

PAGE REVISION CONTROL SHEET

SH NO.	PAGE REVISIONS				REMARKS
1	A	B	C	D	
2	A	A	A	A	
3	A	B	B	B	
4	A	A	B	C	
5	A	A	A	B	
6	A	A	A	A	

ECO NO.	00002	KD11B 00003	KD11B 00004	KD11B – 00005
ETCH REV.				
ENG.	BA	MT	MT	DR
DATE	8-21-72	9-24-72	10-25-72	8-15-73

FIRST USED ON OPTION/MODEL

KD11-B

DRN. M. Towne	DATE 8-21-72	
CHK'D. R W McGillvary	DATE 8-21-72	
ENG. B. ARMSTRONG	DATE 8-29-72	
PROJ. ENG. B. ARMSTRONG	DATE 8-29-72	
PROD.	DATE	

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE

MICROPROGRAM SYMBOLIC LISTING

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
COPYRIGHT © 1972 DIGITAL EQUIPMENT CORPORATION"

NEXT HIGHER ASSY. B-DD-KD11-B

SCALE —

SHEET 1 OF 6

SIZE	CODE	NUMBER	REV.
K	MP	KD11-B-2	D

DIST.

NAME	LOC	ABT	ALG	ALU	AUX	BAR	BLG	BRG	BUT	CON	CKO	CRI	PSW	SAM	SPA	SPF	TNS	NXT
A145	145	YES	PSW	AA	ON	L	+1	H	MOV	NON	ON	OFF	OFF	L				
B#1	015	NO	SP	ASL	OFF	H	BRG	SL	NON	NON	OFF	OFF	H					
B#2	147	NO	SP	A+B	OFF	H	BRG	L	NON	NON	OFF	OFF	H					
B#3	146	NO	SP	BL	OFF	H	BRG	H	SRV	NON	OFF	OFF	H					
B2#2	305	NO	SP	AL	OFF	H	BRG	H	SRV	NON	OFF	OFF	H					
B2#2A	333	NO	SP	AL	OFF	H	BRG	H	SRV	NON	OFF	OFF	H					
B2#2B	335	NO	SP	AL	OFF	H	BRG	H	SRV	NON	OFF	OFF	H					
B2#2C	343	NO	SP	AL	OFF	H	BRG	H	SRV	NON	OFF	OFF	H					
B2#2D	013	NO	SP	AL	OFF	H	BRG	H	SRV	NON	OFF	OFF	H					
BG#1	040	NO	SP	AL	OFF	H	BRG	H	INT	NON	OFF	OFF	H					
BT#1	045	NO	NUL	AL	OFF	H	BRG	L	CON	14	OFF	OFF	H					
CC#1	112	NO	PSW	ABBAR	OFF	H	BRG	H	SRV	NON	OFF	OFF	L					
CCM#1	151	NO	NUL	AANDB	OFF	H	BRG	L	CON	360	OFF	OFF	H					
CCM#2	350	NO	SP	AL	OFF	H	BRG	H	DST	NON	OFF	OFF	H					
CCS#1	316	NO	SP	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	H					
CCS#2	276	NO	SP	AL	OFF	H	BRG	H	SW	NON	OFF	OFF	H					
CCS#3	272	NO	SP	ZERO	OFF	H	BRG	H	IRC	NO	OFF	OFF	H					
CD1#1	313	NO	SP	AL	OFF	H	BRG	L	SW	NON	OFF	OFF	H					
CD1#2	303	NO	NUL	ABAR	OFF	L	BRG	H	CON	200	ON	OFF	H					
CD1#3	374	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	H					
CD1#4	314	NO	SP	AL	OFF	L	BRG	H	NON	NON	ON	OFF	H					
CD1#5	372	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	H					
CD2#1	312	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	H					
CD2#2	337	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	H					
CE1#1	317	NO	SP	AL	OFF	L	BRG	L	SW	NON	OFF	OFF	H					
CE1#2	307	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	H					
CE1#3	326	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	H					
CE2#1	315	NO	SP	A+B	OFF	L	+1	L	NON	NON	OFF	ON	H					
CE2#2	371	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	H					
CL#1	311	NO	NUL	ABAR	OFF	L	BRG	H	CON	207	ON	OFF	H					
CL#2	375	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	H					
CL#3	367	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	H					
CS#1	100	NO	SP	ZERO	OFF	H	BRG	H	IRC	NON	OFF	OFF	H					
CS#2	322	NO	SP	AL	OFF	L	BRG	L	NON	NON	OFF	OFF	H					
CS#3	321	NO	SP	BL	OFF	H	BRG	H	SRV	NON	OFF	OFF	H					
D0#1	101	NO	SP	AL	OFF	H	BRG	L	MOV	NON	OFF	OFF	H					
D0#2	157	NO	SP	BL	OFF	H	BRG	H	UNY	NON	OFF	OFF	H					
D0#3	162	NO	SP	ABAR	ON	H	BRG	L	NMD	NON	OFF	ON	H					
D0#3A	155	NO	SP	ABAR	ON	H	BRG	L	NMD	NON	OFF	ON	H					
D0#4	332	NO	SP	BL	OFF	H	BRG	H	SRV	NON	OFF	OFF	H					
D1#1	103	YES	SP	AL	OFF	L	BRG	L	JOJ	NON	ON	OFF	H					
D1#2	200	NO	NUL	AL	OFF	H	BRG	L	BYT	NON	OFF	OFF	H					
D1#3	210	NO	SP	BL	OFF	H	BRG	H	UNY	NON	OFF	OFF	H					
D1#4	163	NO	SP	ABAR	ON	H	BRG	L	NMD	NON	OFF	ON	H					

NAME	LOC	ABT	ALG	ALU	AUX	EAR	ALG	BRG	BUT	CON	CKO	CRI	PSW	SAM	SPA	SPF	TNS	NXT
D1-5	334	YES	SP	AL	OFF	H	BRG	H	NON	NON	ON	OFF	H	ROM	R0	REA	D	D1-6
D1-6	065	NO	SP	BL	OFF	H	BRG	H	NON	NON	OFF	OFF	H	ROM	R0	REA	NON	B2-2
D2-1	105	YES	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	H	IRD	R0	REA	IP	D2-2
D2-2	331	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	H	IRD	R0	REA	NON	D2-3
D2-3	341	NO	SP	BL	OFF	H	BRG	H	JOJ	NON	ON	OFF	H	IRD	R0	WRI	NON	D1-2
D3-1	107	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	H	IRD	R0	REA	I	D3-2
D3-2	160	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	H	IRD	R0	REA	NON	D3-3
D3-3	070	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	H	IRD	R0	WRI	NON	D3-4
D3-4	071	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	H	BAR	R0	REA	NON	D3-5
D3-5	072	YES	SP	BL	OFF	L	BRG	H	JOJ	NON	ON	OFF	H	ROM	R0	REA	IP	D1-2
D4-1	111	YES	SP	A-B-1	OFF	L	+1	L	END	NON	OFF	ON	H	IRD	R0	REA	IP	D2-3
D5-1	113	NO	SP	A-B-1	OFF	L	+1	L	END	NON	OFF	OFF	H	IRD	R0	REA	I	D3-3
D6-1	115	NO	SP	AL	OFF	L	BRG	H	NON	NON	OFF	OFF	H	ROM	R7	REA	I	D6-2
D6-2	075	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	H	ROM	R7	REA	NON	D6-3
D6-3	077	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	H	ROM	R7	WRI	NON	D6-4
D6-4	057	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	H	BAR	R0	REA	NON	D6-5
D6-5	300	YES	SP	A+B	OFF	L	BRG	L	JOJ	NON	ON	OFF	H	IRD	R0	REA	IP	D1-2
D7-1	117	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	H	ROM	R7	REA	I	D7-2
D7-2	310	NO	SP	A+B	OFF	H	+1	L	NON	NON	OFF	ON	H	ROM	R7	REA	NON	D7-3
D7-3	104	NO	SP	BL	OFF	H	BRG	H	NON	NON	ON	OFF	H	ROM	R7	WRI	NON	D7-4
D7-4	320	NO	NUL	AL	OFF	H	BRG	L	NON	NON	OFF	OFF	H	BAR	R0	REA	NON	D7-5
D7-5	106	NO	SP	A+B	OFF	L	BRG	H	NON	NON	ON	OFF	H	IRD	R0	REA	I	D3-4
DB0-1	156	NO	SP	BL	OFF	H	SEX	L	UNY	NON	OFF	OFF	H	ROM	R11	WRI	NON	SB1-5
DB0-2	164	NO	SP	ABAR	ON	H	BRG	L	NMD	NON	OFF	ON	H	ROM	R10	REA	NON	DB0-3
DB0-3	304	NO	SPR	BL	OFF	H	BRG	H	SRV	NON	OFF	OFF	H	IRD	R0	WRI	NON	RG-1
DBE-1	110	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	H	ROM	R0	REA	NON	H-1
DE-1	250	NO	SP	BL	OFF	H	SEX	L	UNY	NON	OFF	OFF	H	ROM	R11	WRI	NON	D1-4
DD-1	270	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	ON	H	ROM	R0	REA	NON	D0-2
DD-10	165	NO	SP	ABAR	ON	H	BRG	L	NMD	NON	OFF	ON	H	ROM	R10	REA	NON	D0-11
DD-11	342	NO	SP	AL	OFF	H	BRG	H	NON	NON	OFF	OFF	H	ROM	R0	REA	NON	D0-12
DD-12	135	NO	SP	AL	OFF	H	BRG	SL	NON	NON	OFF	OFF	H	ROM	R0	REA	NON	D0-13
DD-13	136	NO	SP	AL	OFF	H	BRG	SL	NON	NON	OFF	OFF	H	ROM	R0	REA	NON	D0-14
DD-14	137	NO	SP	AL	OFF	H	BRG	SL	NON	NON	OFF	OFF	H	ROM	R0	REA	NON	D0-15
DD-15	140	NO	SP	AL	OFF	H	BRG	SL	NON	NON	OFF	OFF	H	ROM	R0	REA	NON	D0-16
DD-16	141	NO	SP	AL	OFF	H	BRG	SL	NON	NON	OFF	OFF	H	ROM	R0	REA	NON	D0-17
DD-17	142	NO	SP	AL	OFF	H	BRG	SL	NON	NON	OFF	OFF	H	ROM	R0	REA	NON	D0-18
DD-18	143	YES	SP	AL	OFF	H	BRG	SL	NON	NON	ON	OFF	H	ROM	R0	REA	D	D1-6
DD-2	123	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	ON	H	ROM	R0	REA	NON	D0-7
DD-3	124	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	H	ROM	R0	REA	NON	D0-8
DD-4	125	NO	SP	AL	OFF	H	BRG	SL	NON	NON	OFF	ON	H	ROM	R0	REA	NON	D0-9
DD-5	126	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	H	ROM	R0	REA	NON	D0-6
DD-6	127	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	ON	H	ROM	R0	REA	NON	D0-7
DD-7	130	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	OFF	H	ROM	R0	REA	NON	D0-8
DD-8	131	NO	SP	AL	OFF	H	BRG	SR	NON	NON	OFF	ON	H	ROM	R0	REA	NON	D0-9

```
NAME  LOC ABT ALG  ALU  AUX BAR BLC BRG PUT CON CKO CRI FSH PSW SAM SPA SPF TNS  NXT

DO-9  132 NO  SP  PL   OFF H  SEM H  UNV NON OFF OFF H  ROM R11 WRI NON A145
ERT-1 210 NO  NUL AL   OFF H  ERC L  CON 4   OFF OFF H  ROM R6  WRI NON ET-2
ERT1A 246 NO  NUL AL   OFF H  ERC L  CON 4   OFF OFF H  ROM R0  WRI NON ET2-2
ER*1* 153 NO  NUL AL   OFF H  ERC L  CON 4   OFF OFF H  ROM R0  WRI NON ET-2

ET-1  211 NO  NUL AL   OFF H  ERC L  CON 32  OFF OFF H  ROM R6  WRI NON ET-2
ET-11 254 NO  SP  AL   OFF L  ERC H  IRC NON ON  OFF H  ROM R12 REA I   ET-11
ET-11 255 NO  SP  AL   OFF H  ERC L  NON NON OFF OFF H  ROM R7  WRI NON ET-12
ET-12 256 NO  SP  A+B  OFF L  +1    NON NON ON  OFF H  ROM R12 REA I   ET-13

ET-13 257 NO  SP  AL   OFF H  ERC L  NON NON OFF OFF L  ROM R0  REA NON B2-2
ET-2  245 NO  SP  PL   OFF H  ERC H  NON NON OFF OFF H  ROM R12 WRI NON ET-3
ET-3  246 NO  SP  A+B-1 OFF L +1    ENO NON OFF OFF H  ROM R6  REA NON ET-5
ET-5  247 NO  SP  BL   OFF H  ERC H  NON NON ON  OFF H  ROM R6  WRI O   ET-6

ET-6  226 NO  PSW AL   OFF H  ERC H  NON NON OFF OFF H  ROM R0  REA NON ET-7
ET-7  251 NO  SP  A+B-1 OFF L +1    ENO NON OFF OFF H  ROM R6  REA NON ET-8
ET-8  252 NO  SP  BL   OFF H  ERC H  NON NON ON  OFF H  ROM R6  WRI O   ET-9
ET-9  253 NO  SP  AL   OFF H  ERC H  NON NON OFF OFF H  ROM R7  REA NON ET-10

ET2-2 203 NO  SP  BL   OFF H  ERC L  NON NON OFF OFF H  ROM R12 WRI NON FT2-3
ET2-3 204 NO  SP  A-B-1 OFF L +1    ENO NON OFF OFF H  ROM R6  REA NON ET2-5
ET2-5 236 NO  SP  BL   OFF H  ERC H  NON NON ON  OFF H  ROM R6  WRI O   FT2-6
ET2-6 237 NO  PSW AL   OFF H  ERC H  NON NON OFF OFF H  ROM R0  REA NON FT2-7

ET2-7 251 NO  SP  A-B-1 OFF L +1    ERC L  NON NON OFF OFF H  ROM R6  REA NON ET-8
F-1   262 NO  SP  AL   OFF H  ERC H  NON NON OFF OFF H  ROM R7  REA I   F-2
F-2   263 NO  SP  A+B  OFF L +1    ERC H  NON NON ON  OFF H  ROM R7  REA NON F-3
F-3   265 NO  SP  BL   OFF H  ERC L  NON NON OFF OFF H  ROM R7  WRI NON F-4

F-4   264 NO  NUL AL   OFF H  ERC L  IRC NON OFF OFF H  BAR R0  REA NON F-5
F-5   261 NO  SP  BL   OFF L  SEM H  IRD NON OFF OFF H  ROM R0  REA NON RT-1
H-1   241 NO  SP  AL   OFF H  ERC L  NON NON OFF OFF H  ROM R7  REA NON H-2
H-2   242 NO  SP  AL   OFF L  ERC H  SW  NON OFF OFF H  ROM R17 REA NON D6-5

INT-1 325 NO  SP  AL   OFF H  ERC H  SVS NON OFF OFF H  ROM R12 WRI NON FT-3
IT-1  273 NO  NUL AL   OFF H  ERC L  CON 22  OFF OFF H  ROM R0  WRI NON ET-2
J1-1  204 NO  SP  AL   OFF H  ERC H  NON NON OFF OFF H  ROM R0  REA NON J1-2
J1-2  266 NO  SP  BL   OFF H  ERC H  SRV NON OFF OFF H  ROM R7  WRI NON BG-1

J2-1  219 NO  SP  AL   OFF H  ERC H  NON NON OFF OFF H  ROM R0  REA NON J2-14
J2-1A 261 NO  SP  BL   OFF H  ERC H  NON NON OFF OFF H  ROM R11 WRI NON J2-2
J2-2  262 NO  SP  A-B-1 OFF L +1    ENO NON OFF OFF H  ROM R6  REA NON J2-3
J2-3  214 NO  SP  BL   OFF H  ERC H  NON NON ON  OFF H  ROM R6  WRI O   J2-4

J2-4  206 NO  SP  AL   OFF H  ERC H  NON NON OFF OFF H  !RS R0  REA NON J2-5
J2-5  214 NO  SP  AL   OFF H  ERC L  NON NON OFF OFF H  ROM R7  REA NON J2-6
J2-6  263 NO  SP  BL   OFF H  ERC H  NON NON OFF OFF H  !RS R0  WRI NON J2-7
J2-7  264 NO  SP  A+B  OFF L  ERC L  NON NON OFF OFF H  ROM R11 REA NON J2-8

J2-8  265 NO  SP  BL   OFF H  ERC H  SRV NON OFF OFF H  ROM R7  WRI NON BG-1
LC-1  042 NO  NUL AL   OFF H  ERC L  CON 100 OFF OFF H  ROM R0  WRI NON ET-2
MB-2  154 NO  SP  AL   OFF H  ERC H  NON NON ON  OFF H  ROM R0  REA NON MB-1
MB-1  240 NO  SP  ABAR ON  H  ERC L  NON NON OFF ON H  ROM R10 REA NON MB-2
```



```
NAME  LOC ABT ALG  ALU  AUX BAR BLC BRG PUT CON CKO CRI FSH PSW SAM SPA SPF TNS  NXT

MB-2  152 NO  SP  BL   OFF H  SEM H  SRV NON OFF OFF OFF H  IRD R0  WRI NON BG-1
PF-1  243 NO  NUL AL   OFF H  ERC L  CON 24  OFF OFF H  ROM R0  WRI NON ET-2
R1-1  235 NO  SP  AL   OFF L  ERC H  NON NON OFF OFF H  ROM R6  REA I   R1-2
R1-2  221 NO  SP  A+B  OFF H  +1    L  NON NON OFF ON  OFF H  ROM R6  REA NON R1-3

R1-3  222 NO  SP  BL   OFF H  ERC H  NON NON OFF OFF H  ROM R6  WRI NON R1-4
R1-4  223 NO  SP  AL   OFF L  ERC L  NON NON OFF OFF H  !RD R0  REA NON R1-5
R1-5  224 NO  SP  BL   OFF H  ERC H  NON NON ON  OFF H  ROM R7  WRI NON R1-6
R1-6  225 NO  NUL AL   OFF H  ERC L  NON NON OFF OFF H  BAR R0  REA NON D0-4

R2-1  227 NO  SP  AL   OFF L  ERC H  NON NON OFF OFF H  ROM R6  REA I   R2-2
R2-2  238 NO  SP  A+B  OFF H  +1    L  NON NON ON  OFF H  ROM R6  REA NON R2-3
R2-3  231 NO  SP  BL   OFF H  ERC H  NON NON OFF OFF H  ROM R6  WRI NON R2-4
R2-4  232 NO  SP  AL   OFF H  ERC H  NON NON OFF OFF H  ROM R7  WRI NON R2-6

R2-5  234 NO  SP  AL   OFF L  ERC H  NON NON OFF OFF H  ROM R6  REA I   R2-7
R2-7  235 NO  SP  A+B  OFF H  +1    L  NON NON ON  OFF H  ROM R6  REA NON R2-8
R2-8  236 NO  SP  BL   OFF H  ERC H  NON NON OFF OFF H  ROM R6  WRI NON R2-9
R2-9  237 NO  NUL AL   OFF H  ERC H  NON NON OFF OFF L  ROM R0  REA NON R2-2

RS-1  227 NO  NUL AL   OFF L  ERC H  CON 24  OFF OFF H  ROM R0  WRI I   RS-1A
RS-1A 241 NO  SP  AL   OFF H  ERC H  NON NON ON  OFF H  ROM R0  REA NON RS-2
RS-2  247 NO  SP  AL   OFF H  ERC H  NON NON OFF OFF H  ROM R7  WRI NON RS-3
RS-3  274 NO  NUL A+B  OFF L  +1    H  CON 24  ON  ON H  ROM R0  WRI I   RS-4

RS-4  251 NO  SP  AL   OFF H  ERC H  NON NON OFF OFF L  ROM R0  REA NON R2-2
RST-1 257 NO  SP  AL   OFF H  ERC H  INI NON ON  OFF H  ROM R0  REA NON R2-2
RT-1  221 NO  NUL AL   OFF H  ERC L  CON 10  OFF OFF H  ROM R0  WRI NON ET-2
S0-1  221 NO  SP  AL   OFF H  ERC L  BYT NON OFF OFF H  IRS R0  REA NON S0-2

S0-2  227 NO  SP  BL   OFF H  ERC H  DST NON OFF OFF OFF H  ROM R10 WRI NON RT-1
S1-1  237 YES SP  AL   OFF L  ERC H  NON NON ON  OFF H  IRS R0  REA I   S1-2
S1-2  244 NO  NUL AL   OFF H  ERC L  BYT NON OFF OFF OFF H  BAR R0  REA NON S0-2
S2-1  205 YES SP  AL   OFF L  ERC H  NON NON OFF OFF OFF H  IRS R0  REA I   S2-2

S2-2  221 NO  SP  A+B  OFF H  +1    L  NON NON OFF ON  OFF H  IRS R0  REA NON S2-3
S2-3  214 NO  SP  BL   OFF H  ERC H  NON NON ON  OFF H  IRS R0  WRI NON S1-2
S3-1  207 NO  SP  AL   OFF L  ERC H  NON NON OFF OFF OFF H  IRS R0  REA I   S3-2
S3-2  216 NO  SP  A+B  OFF H  +1    L  NON NON OFF ON  OFF H  IRS R0  REA NON S3-3

S3-3  217 NO  SP  BL   OFF H  ERC H  NON NON ON  OFF OFF H  IRS R0  WRI NON S3-4
S3-4  134 YES SP  AL   OFF H  ERC L  NON NON OFF OFF OFF H  BAR R0  REA NON S3-5
S3-5  274 YES SP  BL   OFF L  ERC H  NON NON ON  OFF OFF H  ROM R0  REA I   S1-2
S4-1  211 YES SP  A-B-1 OFF L +1    L  ENO NON OFF OFF OFF H  IRS R0  REA I   S2-3

S5-1  213 NO  SP  A-B-1 OFF L +1    L  ENO NON OFF OFF OFF H  IRS R0  REA I   S3-3
S6-1  215 NO  SP  AL   OFF L  ERC H  NON NON OFF OFF OFF H  ROM R7  REA I   S6-2
S6-2  226 NO  SP  A+B  OFF H  +1    L  NON NON OFF ON  OFF H  ROM R7  REA NON S6-3
S6-3  226 NO  SP  BL   OFF H  ERC H  NON NON ON  OFF OFF H  ROM R7  WRI NON S6-4

S6-4  227 NO  NUL AL   OFF L  ERC L  NON NON OFF OFF OFF H  BAR R0  REA NON S6-5
S6-5  232 YES SP  A+B  OFF L  ERC H  NON NON ON  OFF OFF H  IRS R0  REA I   S1-2
S7-1  217 NO  SP  AL   OFF L  ERC H  NON NON OFF OFF OFF H  ROM R7  REA I   S7-2
S7-2  232 NO  SP  A+B  OFF H  +1    L  NON NON OFF ON  OFF H  ROM R7  REA NON S7-3
```

K-mP-40-1180 MICROPROGRAM SYMBOLIC LISTING REV. A

SAM	SPA	SPF	TNS	NXT
ROM	R7	WRI	NON	S7=4
BAR	R0	REA	NON	S7=5
IR3	R0	REA	!	S3=4
ROM	R0	REA	NON	SB1=2
ROM	R0	REA	NON	SB1=3
ROM	R0	REA	NON	SB1=4
ROM	R0	REA	NON	SB1=5
ROM	R0	REA	NON	SB1=6
ROM	R0	REA	NON	SB1=7
ROM	R0	REA	NON	SB1=8
ROM	R0	REA	NON	D0=3A
ROM	R0	REA	NON	SB2=2
ROM	R0	REA	NON	SB2=3
ROM	R0	REA	NON	SB2=4
ROM	R0	REA	NON	SB2=5
ROM	R0	REA	NON	SB2=6
ROM	R0	REA	NON	SB2=7
ROM	R0	REA	NON	SB2=8
ROM	R0	REA	NON	D1=4
ROM	R10	WRI	NON	R?=1
ROM	R0	REA	NON	SB0=2
ROM	R0	REA	NON	SB0=3
ROM	R0	REA	NON	SB0=4
ROM	R0	REA	NON	SB0=5
ROM	R0	REA	NON	SB0=6
ROM	R0	REA	NON	SB0=7
ROM	R0	REA	NON	SB0=8
ROM	R0	REA	NON	SBE=1
ROM	R0	REA	NON	BG=1
ROM	R0	WRI	NON	E?=2
ROM	R10	WRI	NON	D0=3
ROM	R10	WRI	NON	D1=4
ROM	R10	WRI	NON	DB0=2
ROM	R10	WRI	NON	D0=10
ROM	R10	WRI	NON	D1=4
ROM	R0	WRI	NON	E?=2
ROM	R0	WRI	NON	E?=2
ROM	R0	REA	NON	BG=1

NAME	LOC	ABT	ALG	ALU	AUX	BAR	BLG	BRG	BUT	CON	CKO	CRI	FSH	PSW
S7=3	033	NO	SP	BL	OFF	H		BRG	H	NON	NON	ON	OFF	OFF H
S7=4	034	NO	NUL	AL	OFF	H		BRG	L	NON	NON	OFF	OFF	OFF H
S7=5	035	NO	SP	A+B	OFF	L		BRG	H	NON	NON	ON	OFF	OFF H
SB1=1	166	NO	SP	ASR	OFF	H		BRG	SL	NON	NON	OFF	OFF	ON H
SB1=2	172	NO	SP	ASR	OFF	H		BRG	SL	NON	NON	OFF	OFF	ON H
SB1=3	173	NO	SP	ASR	OFF	H		BRG	SL	NON	NON	OFF	OFF	ON H
SB1=4	174	NO	SP	ASR	OFF	H		BRG	SL	NON	NON	OFF	OFF	ON H
SB1=5	144	NO	SP	ASR	OFF	H		BRG	SL	NON	NON	OFF	OFF	ON H
SB1=6	176	NO	SP	ASR	OFF	H		BRG	SL	NON	NON	OFF	OFF	ON H
SB1=7	177	NO	SP	ASR	OFF	H		BRG	SL	NON	NON	OFF	OFF	ON H
SB1=8	006	NO	SP	ASR	OFF	H		BRG	SL	NON	NON	OFF	OFF	OFF H
SB2=1	167	NO	SP	ASR	OFF	H		BRG	SL	NON	NON	OFF	OFF	ON H
SB2=2	012	NO	SP	ASR	OFF	H		BRG	SL	NON	NON	OFF	OFF	ON H
SB2=3	220	NO	SP	ASR	OFF	H		BRG	SL	NON	NON	OFF	OFF	ON H
SB2=4	022	NO	SP	ASR	OFF	H		BRG	SL	NON	NON	OFF	OFF	ON H
SB2=5	023	NO	SP	ASR	OFF	H		BRG	SL	NON	NON	OFF	OFF	ON H
SB2=6	024	NO	SP	ASR	OFF	H		BRG	SL	NON	NON	OFF	OFF	ON H
SB2=7	031	NO	SP	ASR	OFF	H		BRG	SL	NON	NON	OFF	OFF	ON H
SB2=8	330	NO	SP	ASR	OFF	H		BRG	SL	NON	NON	OFF	OFF	OFF H
SBE=1	047	NO	SP	BL	OFF	H		SEX	H	DS?	NON	OFF	OFF	OFF H
SB0=1	067	NO	SP	AL	OFF	H		BRG	SR	NON	NON	OFF	OFF	ON H
SB0=2	346	NO	SP	AL	OFF	H		BRG	SR	NON	NON	OFF	OFF	ON H
SB0=3	324	NO	SP	AL	OFF	H		BRG	SR	NON	NON	OFF	OFF	ON H
SB0=4	340	NO	SP	AL	OFF	H		BRG	SR	NON	NON	OFF	OFF	ON H
SB0=5	361	NO	SP	AL	OFF	H		BRG	SR	NON	NON	OFF	OFF	ON H
SB0=6	050	NO	SP	AL	OFF	H		BRG	SR	NON	NON	OFF	OFF	ON H
SB0=7	020	NO	SP	AL	OFF	H		BRG	SR	NON	NON	OFF	OFF	ON H
SB0=8	052	NO	SP	AL	OFF	H		BRG	SR	NON	NON	OFF	OFF	OFF H
SC=1	116	NO	PSW	AORB	OFF	H		BRG	H	SRV	NON	OFF	OFF	OFF L
T=1	021	NO	NUL	AL	OFF	H		BRG	L	CON	34	OFF	OFF	OFF H
U1=1	352	NO	SP	BL	OFF	H		BRG	H	NON	NON	ON	OFF	OFF H
U2=1	353	NO	SP	BL	OFF	H		BRG	H	NON	NON	ON	OFF	OFF H
U3=1	354	NO	SP	BL	OFF	H		BRG	H	NON	NON	ON	OFF	OFF H
U4=1	355	NO	SP	BL	OFF	H		BRG	H	NON	NON	ON	OFF	OFF H
U5=1	373	NO	SP	BL	OFF	H		BRG	H	NON	NON	ON	OFF	OFF H
URTR	064	NO	NUL	AL	OFF	H		BRG	L	CON	60	OFF	OFF	OFF H
URTX	060	NO	NUL	AL	OFF	H		BRG	L	CON	64	OFF	OFF	OFF H
W=1	063	NO	SP	AL	OFF	H		BRG	H	SRV	NON	OFF	OFF	OFF H

PAGE REVISION CONTROL SHEET

SH NO.	PAGE REVISIONS																			REMARKS
1	A	B	C	D																
2	A	A	A	A																
3	A	B	B	B																
4	A	A	B	B																
5	A	A	A	B																
6	A	A	A	B																
7	A	A	A	A																

ECO NO.	00002	KD11B 00003	KD11B 00004	KD11B-00005																
ETCH REV.																				
ENG.	BA	MT	MT	DR																
DATE	4-21-72	9-24-72	10-30-72	8-15-73																

FIRST USED ON OPTION/MODEL

KD11-B

DRN. M. Towne	DATE 8-21-72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D. R McCallum	DATE 8-21-72	
ENG. B. ARMSTRONG	DATE 8-29-72	
PROJ. ENG. B. ARMSTRONG	DATE 8-29-72	
PROD.	DATE	

TITLE

MICROPROGRAM BINARY LISTING

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
COPYRIGHT © 1972 DIGITAL EQUIPMENT CORPORATION"

NEXT HIGHER ASSY.

B-DD-KD11-B

SCALE ++

SHEET 1 OF 7

SIZE	CODE	NUMBER	REV.
K	MP	KD11-B-3	D

DIST.

KD-11B MICROPROGRAM BINARY LISTING REV, A

N A M C	L O C T	N X T	A L U	C F A R S U I H X	B S S A T P P K B N L R O T S 6 G	B S S A T P P K B N L R O T S 5 G	A B U T	B S S P F 2	C A T L R G	A B U T	C F A R S U I H X	P S S D S P P I W 1 3 P	S S S B M P M B O O 1 T
A145	145	0000	0000	0 0 0 0	** ** ** **	00 00	0101	0 0	10	0101	0 0 0 0	0 0 0 0	0 0 0 0
B=1	015	1001	1000	0 0 0 1	1 1 1 1	11 01	1111	0 1	11	1111	0 0 0 1	1 0 0 1	1 0 1 1
B=2	147	1001	1001	0 1 1 0	1 1 1 1	11 11	1111	1 1	11	1111	0 1 1 0	1 1 0 1	1 1 1 1
B=3	146	1101	1111	0101	1 1 1 1	11 00	1100	1 1	11	1100	0 1 0 1	1 1 0 1	1 1 1 1
B2=2	305	1101	1111	0000	1 1 1 1	11 00	1100	1 1	11	1100	0 0 0 1	1 0 0 1	1 0 1 1
B2=2A	333	1101	1111	0000	1 1 1 1	11 00	1100	1 1	11	1100	0 0 0 1	1 0 0 1	1 0 1 1
B2=2B	335	1101	1111	0000	1 1 1 1	11 00	1100	1 1	11	1100	0 0 0 1	1 0 0 1	1 0 1 1
B2=2C	343	1101	1111	0000	1 1 1 1	11 00	1100	1 1	11	1100	0 0 0 1	1 0 0 1	1 0 1 1
B2=2D	013	1101	1111	0000	1 1 1 1	11 00	1100	1 1	11	1100	0 0 0 1	1 0 0 1	1 0 1 1
BG=1	040	0011	1010	0000	1 1 1 1	11 00	0001	1 1	11	0001	0 0 0 1	1 1 0 1	1 1 1 1
BT=1	045	0101	1010	0000	1 1 1 1	10 11	1101	1 1	11	1101	0 0 0 1	1 1 0 1	1 1 1 1
CC=1	112	1101	1111	0010	1 1 1 1	00 00	1100	1 1	11	1100	0 0 0 1	1 0 0 1	1 0 1 1
CCM=1	151	0001	0111	0001	1 1 1 1	10 11	1101	1 1	00	1101	0 0 0 1	1 0 0 1	1 0 1 1
CCM=2	350	1011	0101	0000	1 1 1 1	11 00	1001	1 1	00	1001	0 0 0 1	1 1 0 1	1 1 1 1
CCS=1	316	0100	0001	0000	1 1 1 1	11 11	1111	1 1	11	1111	0 0 0 1	1 1 0 1	1 1 1 1
CCS=2	276	0100	0111	0000	1 1 1 1	11 00	0110	1 1	00	0110	0 0 0 1	1 0 0 1	1 0 1 1
CCS=3	272	1100	1101	0011	1 1 1 1	11 00	0000	1 1	00	0000	0 0 0 1	1 0 0 1	1 0 1 1
CD1=1	313	0011	1100	0000	1 1 1 1	11 11	1111	1 1	11	1111	0 0 0 1	1 1 0 1	1 1 1 1
CD1=2	303	0000	0011	1111	1 1 1 1	10 00	1101	1 1	00	1101	0 0 0 1	1 0 0 1	1 0 1 1
CD1=3	374	0011	0011	0000	1 1 1 1	10 11	1111	1 1	11	1111	0 0 0 1	1 0 0 1	1 0 1 1
CD1=4	314	0000	0101	0000	1 1 1 1	11 00	1111	1 1	11	1111	0 0 0 1	1 1 0 1	1 1 1 1
CD1=5	372	0011	1101	0101	1 1 1 1	11 00	1111	1 1	11	1111	0 0 0 1	1 1 0 1	1 1 1 1
CD2=1	312	0010	0000	0110	1 1 1 1	11 11	1111	1 1	11	1111	0 0 0 1	1 1 0 1	1 1 1 1
CD2=2	337	0011	0100	0101	1 1 1 1	11 00	1111	1 1	11	1111	0 0 0 1	1 1 0 1	1 1 1 1
CE1=1	317	0011	1000	0000	1 1 1 1	11 11	0110	1 1	11	0110	0 0 0 1	1 1 0 1	1 1 1 1
CE1=2	307	0010	1001	0000	1 1 1 1	11 00	1111	1 1	11	1111	0 0 0 1	1 0 0 1	1 0 1 1
CE1=3	326	0011	1101	0000	1 1 1 1	10 11	1111	1 1	11	1111	0 0 0 1	1 0 0 1	1 0 1 1
CE2=1	315	0000	0110	0110	1 1 1 1	11 11	1111	1 1	11	1111	0 0 0 1	1 1 0 1	1 1 1 1
CE2=2	371	0011	0000	0101	1 1 1 1	11 00	1111	1 1	11	1111	0 0 0 1	1 1 0 1	1 1 1 1
CL=1	311	0000	0010	1111	1 1 1 1	11 00	1101	1 1	00	1101	0 0 0 1	1 0 0 1	1 0 1 1
CL=2	375	0000	1001	0000	1 1 1 1	10 11	1111	1 1	11	1111	0 0 0 1	1 0 0 1	1 0 1 1
CL=3	367	0011	1101	0101	1 1 1 1	11 00	1111	1 1	11	1111	0 0 0 1	1 1 0 1	1 1 1 1
CS=1	100	0010	1101	0011	1 1 1 1	11 00	0000	1 1	11	0000	0 0 0 1	1 0 0 1	1 0 1 1
CS=2	322	0010	1110	0000	1 1 1 1	11 00	1111	1 1	11	1111	0 0 0 1	1 1 0 1	1 1 1 1
CS=3	321	1101	1111	0101	1 1 1 1	11 00	1100	1 1	11	1100	0 0 0 1	1 1 0 1	1 1 1 1
D0=1	101	1001	0011	0000	1 1 1 1	11 11	0101	1 1	11	0101	0 0 0 1	1 1 0 1	1 1 1 1
D0=2	157	1001	1101	0101	1 1 1 1	11 00	1010	1 1	11	1010	0 0 0 1	1 1 0 1	1 1 1 1
D0=3	162	0010	0101	1111	1 1 1 1	11 11	0010	1 1	11	0010	0 0 0 1	1 1 0 1	1 1 1 1
D0=3A	155	0010	0101	1111	1 1 1 1	11 00	1100	1 1	11	1100	0 0 0 1	1 1 0 1	1 1 1 1
D0=4	332	1101	1111	0101	1 1 1 1	11 00	1100	1 1	11	1100	0 0 0 1	1 1 0 1	1 1 1 1

K-MP- KD-11B MICROPROGRAM BINARY LISTING REV,

N A M C	L O C T	N X T	A L U	C F A R S U I H X	B S S A T P P K B N L R O T S 6 G	B S S A T P P K B N L R O T S 5 G	A B U T	B S S P F 2	C A T L R G	A B U T	C F A R S U I H X	P S S D S P P I W 1 3 P	S S S B M P M B O O 1 T
D1=1	103	0111	1111	0000	1 0 1 1	11 11	1011	0 0	10	1011	1 0 0 0	0 0 0 1	0 0 1 0
D1=2	200	0111	0111	0000	1 0 1 1	10 11	0011	1 1	11	0011	1 0 0 1	0 0 0 1	0 0 1 0
D1=3	210	1001	1100	0101	1 0 1 1	11 00	1010	1 1	00	1010	1 0 0 1	1 1 0 1	1 1 1 1
D1=4	163	0010	0011	1111	1 1 1 0	11 11	0010	1 1	11	0010	1 0 0 1	1 1 0 1	1 1 1 1
D1=5	334	1100	1010	0000	1 0 1 1	11 00	1111	0 0	01	1111	1 0 0 1	1 0 1 1	1 1 1 1
D1=6	065	0011	1010	0101	1 0 1 1	11 00	1111	1 1	11	1111	1 0 0 1	1 0 1 1	1 1 1 1
D2=1	105	0010	0110	0000	1 0 1 1	11 00	1111	1 1	00	1111	1 0 0 1	1 0 1 1	1 1 1 1
D2=2	331	0001	1110	0110	1 0 1 1	11 11	1111	1 1	11	1111	1 0 0 1	1 0 1 1	1 1 1 1
D2=3	341	0111	1111	0101	1 0 1 1	11 00	1011	0 0	11	1011	1 0 0 1	0 0 1 1	1 1 1 0
D3=1	107	1000	1111	0000	1 0 1 1	11 00	1111	1 1	00	1111	1 0 0 1	0 0 1 1	1 1 1 1
D3=2	160	1100	0111	0110	1 0 1 1	11 11	1111	1 1	11	1111	1 0 0 1	0 0 1 1	1 1 1 1
D3=3	070	1100	0110	0101	1 0 1 1	11 00	1111	1 1	00	1111	1 0 0 1	0 0 1 1	1 1 1 1
D3=4	071	1100	0101	0000	1 0 1 1	10 11	1111	1 1	11	1111	1 0 0 1	0 0 1 1	1 1 1 1
D3=5	072	0111	1111	0101	1 0 1 1	11 00	1011	1 1	00	1011	1 0 0 0	1 0 0 1	1 0 1 1
D4=1	111	0001	1110	1001	1 0 1 1	11 11	0100	1 1	11	0100	1 0 0 0	1 0 0 1	1 0 1 1
D5=1	113	1100	0111	1001	0 0 1 1	11 11	0100	1 1	11	0100	1 0 0 1	0 0 1 1	1 1 1 1
D6=1	115	1100	0010	0000	1 0 1 1	11 00	1111	1 1	00	1111	1 1 0 1	1 1 1 1	1 1 1 0
D6=2	075	1100	0000	0110	0 1 1 1	11 11	1111	1 1	11	1111	1 1 0 1	1 1 1 1	1 1 1 1
D6=3	077	1101	0000	0101	1 0 1 1	11 00	1111	1 1	00	1111	1 1 0 1	1 1 1 1	1 1 1 0
D6=4	057	0011	1111	0000	1 0 1 1	10 11	1111	1 1	11	1111	1 1 0 1	1 1 0 1	1 1 0 1
D6=5	300	0111	1111	0110	0 0 1 1	11 11	1011	1 1	11	1011	1 0 0 0	0 0 1 1	1 1 1 0
D7=1	117	0011	0111	0000	1 0 1 1	11 00	1111	1 1	00	1111	1 0 0 1	0 0 1 1	1 1 1 0
D7=2	310	1011	1011	0110	0 0 1 1	11 11	1111	1 1	11	1111	1 0 0 1	0 0 1 1	1 1 1 1
D7=3	104	0010	1111	0101	1 0 1 1	11 00	1111	1 1	00	1111	1 0 0 1	0 0 1 1	1 1 1 1
D7=4	320	1011	1001	0000	1 0 1 1	11 11	1100	0 1	11	1100	1 0 0 1	0 0 1 1	1 1 1 1
D7=5	106	1100	0110	0110	0 0 1 1	11 00	1111	1 1	00	1111	1 0 0 1	0 0 1 1	1 1 1 1
DB0=1	156	1001	1011	0101	1 1 1 0	11 11	1010	1 1	11	1010	1 0 0 1	0 0 1 1	1 1 1 1
DB0=2	164	0011	1011	1111	1 1 1 0	11 00	0010	1 1	00	0010	1 0 0 1	1 1 0 1	1 1 1 0
DB0=3	304	1101	1111	0101	1 0 1 1	01 00	1100	1 1	11	1100	1 0 0 1	0 0 1 1	1 1 1 1
DBE=1	110	1101	1110	0000	1 0 1 1	11 00	1111	1 1	00	1111	1 0 0 1	1 1 1 1	1 1 1 1
DE=1	250	1000	1100	0101	1 0 1 1	11 11	1010	1 1	11	1010	1 0 0 1	1 1 0 1	1 1 1 0
DD=1	270	1010	1100	0000	1 0 0 1	11 01	1111	1 1	01	1111	1 1 0 1	1 1 0 1	1 1 1 1
DD=10	165	0001	1101	1111	1 0 1 1	11 11	0010	1 1	11	0010	1 0 0 1	1 1 0 1	1 1 1 1
DD=11	342	1010	0010	0000	1 0 0 1	11 01	1111	1 1	01	1111	1 1 0 1	1 1 1 1	1 1 1 1
DD=12	135	1010	0001	0000	1 0 0 1	11 01	1111	1 1	01	1111	1 1 0 1	1 1 1 1	1 1 1 1
DD=13	136	1010	0000	0000	1 0 0 1	11 01	1111	1 1	01	1111	1 1 0 1	1 1 1 1	1 1 1 1
DD=14	137	1001	1111	0000	1 0 0 1	11 01	1111	1 1	01	1111	1 0 0 1	1 1 0 1	1 1 1 1
DD=15	140	1001	1110	0000	1 0 0 1	11 01	1111	1 1	01	1111	1 0 0 1	1 1 0 1	1 1 1 1
DD=16	141	1001	1101	0000	1 0 0 1	11 01	1111	1 1	01	1111	1 0 0 1	1 1 0 1	1 1 1 1
DD=17	142	1001	1100	0000	1 0 0 1	11 01	1111	1 1	01	1111	1 0 0 1	1 1 0 1	1 1 1 1

NAM	LOC	NXT	ALU	CRI	FSH	AUX	PSW	SP1	SP3	DIP	SMB	SP0	SM1	BBT	BAR	BTP	SPF	SP2	CK0	AB1	TNS	ALG	BRG	BUT
DO-18	143	1100	1010	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	0	0	0	01	11	01	1111
DO-2	123	1010	1011	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	0	1	1	11	11	10	1111
DO-3	124	1010	1010	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	0	1	1	11	11	10	1111
DO-4	125	1010	1001	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	0	1	1	11	11	10	1111
DO-5	126	1010	1000	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	0	1	1	11	11	10	1111
DO-6	127	1010	0111	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	0	1	1	11	11	10	1111
DO-7	130	1010	0110	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	0	1	1	11	11	10	1111
DO-8	131	1010	0101	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	0	1	1	11	11	10	1111
DO-9	132	1001	1010	0101	1	0	1	1	1	0	1	1	1	1	1	1	0	0	0	1	11	11	11	1010
ERT-1	010	0101	1010	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	0	1	1	11	10	11	1101
ERT1A	046	1111	1100	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	0	1	1	11	10	11	1101
ERT1B	153	0101	1010	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	0	1	1	11	10	11	1101
ET-1	011	0101	1010	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	1	0	1	11	10	11	1101
ET-10	254	0101	0010	0000	1	0	1	1	1	1	1	1	1	0	1	1	0	1	0	0	1	11	00	0000
ET-11	255	0101	0001	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	1	11	11	11	1111
ET-12	256	0101	0000	0110	0	1	1	1	1	1	1	1	1	0	1	0	1	1	0	1	10	11	11	1111
ET-13	257	0011	1010	0000	1	0	1	1	0	0	0	1	1	0	1	1	1	1	0	1	11	11	11	1111
ET-2	245	0101	1001	0101	1	0	1	1	1	1	1	1	1	0	1	1	1	0	0	1	11	11	00	1111
ET-3	246	0101	1000	1001	0	0	1	1	1	0	0	1	1	0	1	0	0	1	1	1	11	11	11	0100
ET-5	247	0110	1001	0101	1	0	1	1	1	1	0	1	1	0	1	1	1	0	1	0	01	11	00	1111
ET-6	226	0101	0110	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	11	00	00	1111
ET-7	251	0101	0101	1001	0	0	1	1	1	1	0	1	1	0	1	0	0	1	1	1	11	11	11	0100
ET-8	252	0101	0100	0101	1	0	1	1	1	1	0	1	1	0	1	1	1	1	0	1	01	11	00	1111
ET-9	253	0101	0011	0000	1	0	1	1	1	1	0	1	1	0	1	1	1	1	1	1	11	11	00	1111
ET2-2	003	1111	1011	0101	1	0	1	1	1	1	1	1	1	0	1	1	1	0	0	1	11	11	11	1111
ET2-3	004	1110	0001	1001	0	0	1	1	1	1	0	1	1	0	1	0	1	1	1	1	11	11	11	1111
ET2-5	036	1110	0000	0101	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	0	01	11	00	1111
ET2-6	037	1101	0110	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	11	00	00	1111
ET2-7	051	0101	0101	1001	0	0	1	1	1	0	0	1	1	0	1	0	1	1	1	1	11	11	11	1111
F-1	362	1101	0100	0000	1	0	1	1	1	1	0	1	1	1	1	1	0	1	1	1	10	11	00	1111
F-2	053	0000	1010	0110	0	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	11	11	11	1111
F-3	366	0000	1011	0101	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	0	1	11	11	1111
F-4	364	1100	1110	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	1	0	1	1	11	0000
F-5	061	1111	1110	0101	1	0	1	1	1	0	0	1	1	0	1	1	1	0	1	0	1	1	11	0111
H-1	041	0011	1101	0000	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	11	11	11	1111
H-2	302	0011	1111	0000	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	11	11	00	0110
INT-1	325	0101	1001	0000	1	0	1	1	1	1	1	1	1	0	1	1	1	0	0	1	11	11	00	1000
IT-1	273	0101	1010	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	1	1	11	10	11	1101
J1-1	204	0100	1111	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	11	11	00	1111
J1-2	260	1101	1111	0101	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	1	11	11	00	1100

NAM	LOC	NXT	ALU	CRI	FSH	AUX	PSW	SP1	SP3	DIP	SMB	SP0	SM1	BBT	BAR	BTP	SPF	SP2	CK0	AB1	TNS	ALG	BRG	BUT
J2-1	212	0100	1110	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	0	1	1	11	11	00	1111
J2-1A	261	0100	1101	0101	1	0	1	1	1	0	1	1	1	1	1	1	0	0	1	1	11	11	00	1111
J2-2	262	0111	0011	1001	0	0	1	1	1	0	1	1	1	0	1	0	1	1	1	1	11	11	11	0100
J2-3	214	0111	1001	0101	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	0	01	11	00	1111
J2-4	206	0111	0001	0000	1	0	1	1	1	0	0	1	1	0	0	1	1	1	1	0	11	11	00	1111
J2-5	216	0100	1100	0000	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	11	11	11	1111
J2-6	263	0100	1011	0101	1	0	1	1	1	0	0	1	1	0	0	1	1	1	0	0	1	11	00	1111
J2-7	264	0100	1010	0000	1	0	1	1	1	0	1	1	1	1	1	1	1	1	0	1	11	11	11	1111
J2-8	265	1101	1111	0101	1	0	1	1	1	1	0	1	1	1	1	1	1	0	1	1	11	11	00	1100
LC-1	242	0101	1010	0000	1	0	1	1	1	0	1	1	1	1	1	1	1	1	0	1	11	10	11	1101
MB-2	154	0101	1111	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	0	11	11	00	1111
MB-1	240	1001	0101	1111	1	1	1	0	1	0	1	1	1	0	1	1	1	1	0	1	11	11	11	1111
MB-2	152	1101	1111	0101	1	0	1	1	1	0	0	1	0	0	1	1	0	0	0	1	11	11	00	1100
PF-1	243	0101	1010	0000	1	0	1	1	1	0	1	1	1	1	1	1	1	1	0	1	11	10	11	1101
R1-1	205	0110	1110	0000	1	0	1	1	1	0	1	1	1	0	1	1	1	1	1	0	11	10	11	1111
R1-2	221	0110	1101	0110	0	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	11	11	11	1111
R1-3	222	0110	1100	0101	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	11	11	00	1111
R1-4	223	0110	1011	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	0	1	11	11	11	1111
R1-5	224	0110	1010	0101	1	0	1	1	1	0	0	1	1	1	1	1	1	0	1	0	1	11	00	1111
R1-6	225	0010	0101	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	1	0	1	11	11	1111
R2-1	227	0110	0111	0000	1	0	1	1	1	0	0	1	1	0	1	1	0	1	1	1	1	10	11	00	1111
R2-2	230	0110	0110	0110	0	1	1	1	1	0	0	1	1	0	1	0	1	1	1	1	11	11	11	1111
R2-3	231	0110	0101	0101	1	0	1	1	1	0	0	1	1	0	1	1	1	0	1	0	1	11	00	1111
R2-4	232	0110	0011	0000	1	0	1	1	1	0	1	1	1	1	1	1	0	1	1	1	11	11	00	1111
R2-6	234	0110	0010	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	0	1	1	11	10	00	1111
R2-7	235	0110	0001	0110	0	1	1	1	1	0	0	1	1	0	1	0	1	1	1	1	11	11	11	1111
R2-8	236	0110	0000	0101	1	0	1	1	1	0	0	1	1	0	1	1	1	0	1	0	1	11	00	1111
R2-9	237	0011	1010	0000	1	0	1	1	0	0	0	1	1	0	1	1	1	1	0	1	11	10	00	1111
RS-1	200	0101	1110	0000	1	0	1	1	1	0	1	1	1	0	1	1	0	1	1	0	1	10	00	1101
RS-1A	241	0001	1000	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	0	1	11	00	1111
RS-2	347	1100	0011	0000	1	0	1	1	1	0	1	1	1	1	1	1	0	1	1	1	11	11	00	1111
RS-3	374	0001	0110	0110	0	1	1	1	0	1	1	1	0	1	0	1	1	0	0	1	10	10	00	1101
RS-4	351	0011	1010	0000	1	0	1	1	0	0	0	1	1	0	1	1	1	1	0	1	11	11	00	1111
RST-1	357	0011	1010	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	0	1	11	00	1110
RT-1	001	0101	1010	0000	1	0	1	1	1	0	1	1	1	0	1	1	1	1	1	1	11	11	10	1101
S0-1	201	1111	1000	0000	1	0	1	1	1	0	0	1	1	0	0	1	1	1	0	1	11	11	11	0011
S0-2	207	1111	1110	0101	1	0	1	1	1	0	1	1	1	0	1	1	1	0	0	1	11	11	00	1001
S1-1	203	0101	1011	0000	1	0	1	1	1	0	0	1	1	0	0	1	0	1	1	0	0	0	10	11	00	1111
S1-2	244	1111	1000	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	1	0	1	1	11	10	11	0011
S2-1	205	0011	1110	0000	1	0	1	1	1	0	0	1	1	0	0	1	0	1	1	0	1	0	10	11	00	1111

NAM	LOC	NXT	ALU	CRI	FSH	AUX	PSW	SS1	PP3	DIP	SMP	SP0	MM1	BBT	BAR	BTP	PF	SP2	CKO	ATB	TNS	ALG	BRG	BUT
S2-2	301	1111	0011	0110	0	1	1	1	0	0	1	1	0	0	0	1	1	1	0	1	1	11	11	11	1111
S2-3	214	0101	1011	0101	1	0	1	1	1	0	0	1	1	0	0	1	1	1	0	0	1	11	11	00	1111
S3-1	207	1111	0001	0000	1	0	1	1	1	0	0	1	1	0	0	1	0	1	1	0	1	10	11	00	1111
S3-2	216	1111	0000	0110	0	1	1	1	1	0	0	1	1	0	0	0	1	1	1	0	1	11	11	11	1111
S3-3	217	1010	0011	0101	1	0	1	1	1	0	0	1	1	0	0	1	1	1	0	0	0	11	11	00	1111
S3-4	134	0100	0011	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	1	0	1	11	10	11	1111
S3-5	274	0101	1011	0101	1	0	1	1	1	0	0	1	1	0	1	1	0	1	1	0	0	10	11	00	1111
S4-1	211	1111	0011	1001	0	0	1	1	1	0	0	1	1	0	0	0	0	1	1	0	1	10	11	11	0100
S5-1	213	1111	0000	1001	0	0	1	1	1	0	0	1	1	0	0	0	0	1	1	0	1	1	10	11	11	0100
S6-1	215	1110	1010	0000	1	0	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	10	11	00	1111
S6-2	225	1110	1001	0110	0	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	11	11	11	1111
S6-3	226	1110	1000	0101	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0	1	0	1	11	11	00	1111
S6-4	227	1110	0111	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	1	0	1	1	11	10	11	1111
S6-5	230	0101	1011	0110	0	0	1	1	1	0	0	1	1	0	0	1	0	1	1	0	0	0	10	11	00	1111
S7-1	217	1110	0101	0000	1	0	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	10	11	00	1111
S7-2	232	1110	0100	0110	0	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	11	11	11	1111
S7-3	233	1110	0011	0101	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0	1	0	1	11	11	00	1111
S7-4	234	1110	0010	0000	1	0	1	1	1	0	0	1	0	0	0	1	1	1	1	0	1	1	11	10	11	1111
S7-5	235	1010	0011	0110	0	0	1	1	1	0	0	1	1	0	0	1	0	1	1	0	0	1	10	11	00	1111
SB1-1	166	1000	0101	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	01	1111
SB1-2	172	1000	0100	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	01	1111
SB1-3	173	1000	0011	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	01	1111
SB1-4	174	1001	1011	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	01	1111
SB1-5	144	1000	0001	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	01	1111
SB1-6	176	1000	0000	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	01	1111
SB1-7	177	1111	1001	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	01	1111
SB1-8	206	1001	0010	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	01	1111
SB2-1	167	1111	0101	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	01	1111
SB2-2	212	0110	1111	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	01	1111
SB2-3	220	1110	1101	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	01	1111
SB2-4	222	1110	1100	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	01	1111
SB2-5	223	1110	1011	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	01	1111
SB2-6	224	1110	0110	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	01	1111
SB2-7	231	0010	0111	1110	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	01	1111
SB2-8	330	1000	1100	1110	0	0	1	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	01	1111
SBE-1	247	1111	1110	0101	1	0	1	1	1	0	1	1	0	1	1	1	1	1	1	0	0	0	11	11	00	1001
SB0-1	267	0001	1001	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	10	1111
SB0-2	346	0010	1011	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	10	1111
SB0-3	324	0001	1111	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	10	1111
SB0-4	340	0000	1110	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1	1	11	11	10	1111

NAM	LOC	NXT	ALU	CRI	FSH	AUX	PSW	SS1	PP3	DIP	SMP	SP0	MM1	BBT	BAR	BTP	PF	SP2	CKO	ATB	TNS	ALG	BRG	BUT
SB0=5	361	1101	0111	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
SB0=6	050	1110	1111	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
SB0=7	020	1101	0101	0000	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
SB0=8	052	1101	1000	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	10	1111
SC=1	116	1101	1111	0100	1	0	1	1	0	0	0	1	1	0	1	1	1	1	0	1	1	11	00	00	1100
T=1	021	0101	1010	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	1	1	1	11	10	11	1101
U1=1	352	1000	1101	0101	1	0	1	1	1	0	1	1	1	0	1	1	1	1	0	0	1	11	11	00	1111
U2=1	353	1000	1100	0101	1	0	1	1	1	0	1	1	1	0	1	1	1	1	0	0	1	11	11	00	1111
U3=1	354	1000	1011	0101	1	0	1	1	1	0	1	1	1	0	1	1	1	1	0	0	1	11	11	00	1111
U4=1	355	1000	1010	0101	1	0	1	1	1	0	1	1	1	0	1	1	1	1	0	0	1	11	11	00	1111
U5=1	373	1000	1100	0101	1	0	1	1	1	0	1	1	1	0	1	1	1	1	0	0	1	11	11	00	1111
URTR	064	0101	1010	0000	1	0	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	11	11	10	1101
URTX	060	0101	1010	0000	1	0	1	1	1	0	0	1	1	1	1	1	1	1	0	1	1	11	11	10	1101
W=1	063	1101	1111	0000	1	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	11	11	00	1100

PAGE REVISION CONTROL SHEET

SH NO.	PAGE REVISIONS	REMARKS
1		
2		
3		

	ECO NO.	ETCH REV.	ENG.	DATE

FIRST USED ON OPTION/MODEL

KD11-B

DRN.	J Madden	DATE 4-21-72
CHK'D.	R. L. Kusik	DATE 5-2-72
ENG.	R. L. Kusik	DATE 5-2-72
PROJ. ENG.	R. L. Kusik	DATE 5-2-72
PROD.	R. L. Kusik	DATE 5-2-72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE

MICROPROGRAM CROSS REFERENCE LISTING

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
COPYRIGHT ©1972 DIGITAL EQUIPMENT CORPORATION"

NEXT HIGHER ASSY.

B-DD-KD11-B

SCALE

SHEET 1 OF 3

SIZE	CODE	NUMBER	REV.
K	MP	KD11-B-4	

DIST.

```
000 RS-1    001 RT-1    002 *****   003 ET2-2   004 ET2-3   005 R1-1    006 SB1-8   007 S0-2
010 ERT-1   011 ET-1    012 SB2-2   013 B2-2D   014 S2-3    015 B-1     016 S3-2    017 S3-3
020 SB0-7   021 T-1     022 SB2-4   023 SB2-5   024 SB2-6   025 S6-2    026 S6-3    027 S6-4
030 S6-5    031 SB2-7   032 S7-2    033 S7-3    034 S7-4    035 S7-5    036 ET2-5   037 ET2-6
040 RG-1    041 W-1     042 LC-1    043 PF-1    044 *****   045 BT-1    046 ERT1A   047 SBE-1
050 SB0-6   051 ET2-7   052 SB0-8   053 F-2     054 *****   055 *****   056 *****   057 D6-4
060 URTX    061 F-5     062 F-1     063 W-1     064 URTR    065 D1-6    066 *****   067 SB0-1
070 D3-3    071 D3-4    072 D3-5    073 *****   074 RS-3    075 D6-2    076 *****   077 D6-3
100 CS-1    101 D0-1    102 *****   103 D1-1    104 D7-3    105 D2-1    106 D7-5    107 D3-1
110 DBE-1   111 D4-1    112 CC-1    113 D5-1    114 *****   115 D6-1    116 SC-1    117 D7-1
120 *****   121 *****   122 *****   123 DO-2    124 DO-3    125 DO-4    126 DO-5    127 DO-6
130 DO-7    131 DO-8    132 DO-9    133 *****   134 S3-4    135 DO-12   136 DO-13   137 DO-14
140 DO-15   141 DO-16   142 DO-17   143 DO-18   144 SB1-5   145 A145    146 B-3     147 B-2
150 *****   151 CCM-1   152 MB-2    153 ERT1B   154 MB-0    155 D0-3A   156 DB0-1   157 D0-2
160 D3-2    161 *****   162 D0-3    163 D1-4    164 DB0-2   165 DO-10   166 SB1-1   167 SB2-1
170 *****   171 *****   172 SB1-2   173 SB1-3   174 SB1-4   175 *****   176 SB1-6   177 SB1-7
200 D1-2    201 S0-1    202 *****   203 S1-1    204 J1-1    205 S2-1    206 J2-4    207 S3-1
210 D1-3    211 S4-1    212 J2-1    213 S5-1    214 J2-3    215 S6-1    216 J2-5    217 S7-1
220 SB2-3   221 R1-2    222 R1-3    223 R1-4    224 R1-5    225 R1-6    226 ET-6    227 R2-1
230 R2-2    231 R2-3    232 R2-4    233 *****   234 R2-6    235 R2-7    236 R2-8    237 R2-9
240 MB-1    241 RS-1A   242 *****   243 *****   244 S1-2    245 ET-2    246 ET-3    247 ET-5
250 DE-1    251 ET-7    252 ET-8    253 ET-9    254 ET-10   255 ET-11   256 ET-12   257 ET-13
260 J1-2    261 J2-1A   262 J2-2    263 J2-6    264 J2-7    265 J2-8    266 *****   267 *****
270 D0-1    271 *****   272 CCS-3   273 IT-1    274 S3-5    275 *****   276 CCS-2   277 *****
300 D6-5    301 S2-2    302 W-2     303 CD1-2   304 DB0-3   305 B2-2    306 *****   307 CE1-2
310 D7-2    311 CL-1    312 CD2-1   313 CD1-1   314 CD1-4   315 CE2-1   316 CCS-1   317 CE1-1
320 D7-4    321 CS-3    322 CS-2    323 *****   324 SB0-3   325 INT-1   326 CE1-3   327 *****
330 SB2-8   331 D2-2    332 D0-4    333 B2-2A   334 D1-5    335 B2-2B   336 *****   337 CD2-2
340 SB0-4   341 D2-3    342 DO-11   343 B2-2C   344 *****   345 *****   346 SB0-2   347 RS-2
350 CCM-2   351 RS-4    352 U1-1    353 U2-1    354 U3-1    355 U4-1    356 *****   357 RST-1
360 *****   361 SB0-5   362 *****   363 *****   364 F-4     365 F-3     366 *****   367 CL-3
370 *****   371 CE2-2   372 CD1-5   373 U5-1    374 CD1-3   375 CL-2    376 *****   377 *****
```



```
A145  145        D6-1  115        F-4   364        S5-1  213
B-1   015        D6-2  075        F-5   061        S6-1  215
B-2   147        D6-3  077        W-1   041        S6-2  025
B-3   146        D6-4  057        W-2   302        S6-3  026
B2-2  305        D6-5  300        INT-1 325        S6-4  027
B2-2A 333        D7-1  117        IT-1  273        S6-5  030
B2-2B 335        D7-2  310        J1-1  204        S7-1  217
B2-2C 343        D7-3  104        J1-2  260        S7-2  032
B2-2D 013        D7-4  320        J2-1  212        S7-3  033
RG-1  040        D7-5  106        J2-1A 261        S7-4  034
BT-1  045        DB0-1 156        J2-2  262        S7-5  035
CC-1  112        DB0-2 164        J2-3  214        SB1-1 166
CCM-1 151        DB0-3 304        J2-4  206        SB1-2 172
CCM-2 350        DBE-1 110        J2-5  216        SB1-3 173
CCS-1 316        DE-1  250        J2-6  263        SB1-4 174
CCS-2 276        DO-1  270        J2-7  264        SB1-5 144
CCS-3 272        DO-10 165        J2-8  265        SB1-6 176
CD1-1 313        DO-11 342        LC-1  042        SB1-7 177
CD1-2 303        DO-12 135        MB-0  154        SB1-8 006
CD1-3 374        DO-13 136        MB-1  240        SB2-1 167
CD1-4 314        DO-14 137        MB-2  152        SB2-2 012
CD1-5 372        DO-15 140        PF-1  043        SB2-3 220
CD2-1 312        DO-16 141        R1-1  005        SB2-4 022
CD2-2 337        DO-17 142        R1-2  221        SB2-5 023
CE1-1 317        DO-18 143        R1-3  222        SB2-6 024
CE1-2 307        DO-2  123        R1-4  223        SB2-7 031
CE1-3 326        DO-3  124        R1-5  224        SB2-8 330
CE2-1 315        DO-4  125        R1-6  225        SBE-1 047
CE2-2 371        DO-5  126        R2-1  227        SB0-1 067
CL-1  311        DO-6  127        R2-2  230        SB0-2 346
CL-2  375        DO-7  130        R2-3  231        SB0-3 324
CL-3  367        DO-8  131        R2-4  232        SB0-4 340
CS-1  100        DO-9  132        R2-6  234        SB0-5 361
CS-2  322        ERT-1 010        R2-7  235        SB0-6 050
CS-3  321        ERT1A 046        R2-8  236        SB0-7 020
D0-1  101        ERT1B 153        R2-9  237        SB0-8 052
D0-2  157        ET-1  011        RS-1  000        SC-1  116
D0-3  162        ET-10 254        RS-1A 241        T-1   021
D0-3A 155        ET-11 255        RS-2  347        U1-1  352
D0-4  332        ET-12 256        RS-3  074        U2-1  353
D1-1  103        ET-13 257        RS-4  351        U3-1  354
D1-2  200        ET-2  245        RST-1 357        U4-1  355
D1-3  210        ET-3  246        RT-1  001        U5-1  373
D1-4  163        ET-5  247        S0-1  201        URTR  064
D1-5  334        ET-6  226        S0-2  007        URTX  060
D1-6  065        ET-7  251        S1-1  203        W-1   063
D2-1  105        ET-8  252        S1-2  244         000
D2-2  331        ET-9  253        S2-1  205         000
D2-3  341        ET2-2 003        S2-2  301         000
D3-1  107        ET2-3 004        S2-3  014         000
D3-2  160        ET2-5 036        S3-1  207         000
D3-3  070        ET2-6 037        S3-2  016         000
D3-4  071        ET2-7 051        S3-3  017         000
D3-5  072        F-1   062        S3-4  134         000
D4-1  111        F-2   053        S3-5  274         000
D5-1  113        F-3   365        S4-1  211         000
```

PAGE REVISION CONTROL SHEET

SH NO.	PAGE REVISIONS																			REMARKS
1	J	K	L	M	N															
2	J	K	L	M	N															
3	J	J	J	M	N															
4	J	J	J	M	N															
5	J	J	J	M	M															
6	J	J	J	M	M															
7	J	J	J	M	M															
8	J	J	J	M	N															
9	J	J	J	M	M															
10	J	K	L	M	M															
11	J	J	J	M	M															
12	-	1	1	M	M															
ECO NO.	00007	00008	00009	00010 & 10A	00012															
ETCH REV.	B	B	B	C	C															
ENG.	MT.	B.A.	M.T.	B A	M.T.															
DATE	10-11-72	10-30-72	11-27-72	2-23-73	6-19-73															

FIRST USED ON OPTION/MODEL

KD11-B

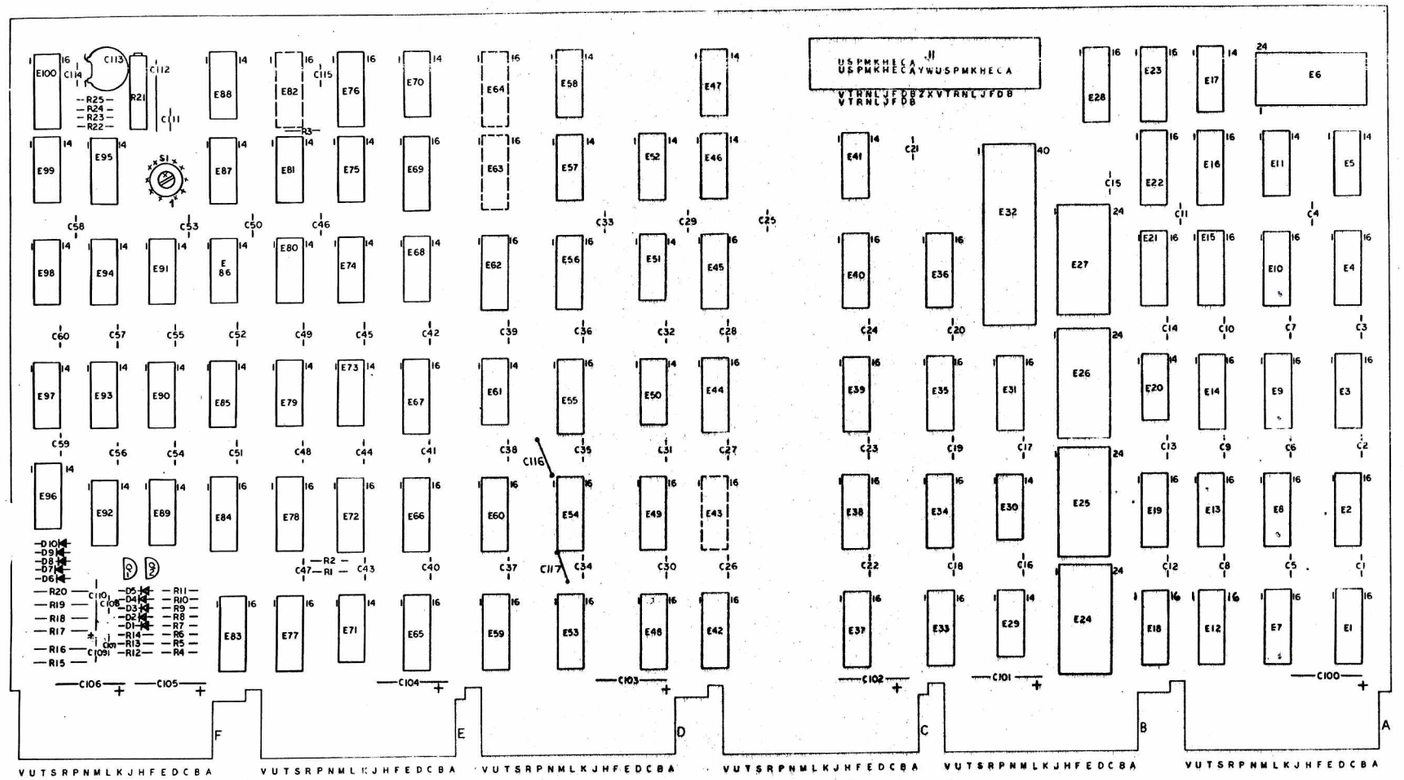
DRN. B. Hall	DATE 10-16-72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
CHK'D. M. Tellbaum	DATE 10/26/72		
ENG. M. Tellbaum	DATE 10/26/72	TITLE	
PROJ. ENG. M. Tellbaum	DATE	DATA PATHS	
PROD.	DATE		

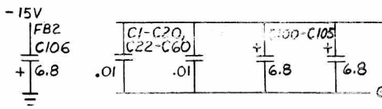
"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
COPYRIGHT © DIGITAL EQUIPMENT CORPORATION"

NEXT HIGHER ASSY.	SIZE	CODE	NUMBER	REV.
B-DD-KD11-B	B	CS	M7260-0-1	N
SCALE ++				
SHEET 1 OF 12	DIST.			

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

NOTES:




-15V
FB2
C106
6.8
.01
C1-C20, C22-C60
.01
C61-C105
6.8
6.8
+5V • AA2, BA2, CA2, DA2, EA2, FA2
GND • AB2, AC2, AN2, AP2, AR2, AS2, AT2, AV2, AN1, AP1, AR1, AS1, AT1, BB2, BC2, BD2, BE2, BT2, BV2, BD1, BE1, BT1, CC2, CT1, DC2, DT1, EC2, ET1, FC2, FT1, J1A-B, PP, UU, VV.

IC TYPE		
DEC 74174	8	16
DEC 74175	8	16
DEC 7489	8	16
DEC 1808	3	1
DEC 74182	8	16
DEC 74181	12	24
DEC 74157	8	16
DEC 74S158	8	16
DEC 74153	8	16
DEC 74194	8	16
DEC 74150	12	24
DEC 8838	8	16

GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY. EXCEPTIONS ARE STATED ABOVE.

IC PIN LOCATIONS

DEC FORM NO. DRD-135A

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

FIRST USED ON OPTION MODEL

ETCH BOARD REV C

REV	CHANGE NO.	DEC NO.	EIA NO.	DEC NO.	EIA NO.

REVISIONS

CHK

SEMICONDUCTOR CONVERSION CHART

DRN. K. Saulitis DATE 11/22/73
CHK'D DATE 12/2/73
ENG. DATE 12/2/73
PROJ. ENG. DATE 12/2/73
PROD. DATE 12/9/73

NEXT HIGHER ASSY B-DD-KD11-B

SCALE

SHEET 2 OF

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE DATA PATHS

SIZE	CODE	NUMBER	REV.
D	CS	M7260-0-1	N

DIST.

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

NOTES:

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
REF		ETCH CIRCUIT BOARD		1
REF		X-Y COORDINATE HOLE/LAYOUT	M7260-0-4	2
REF		DATA PATH ASSY HOLE/LAYOUT	M7260-0-5	3
REF		MODULE ECO HISTORY	M7260-0-6	4
63	C1-60,108,109,111	CAP .01 MFD,100V, 20% DISC	1001610	5
1	C110	CAP .47 MFD, 35V, 10%	1005965	6
3	C107,114,116	CAP 1000.0 MMF, 100V 5%	1000042	7
1	C113	CAP 4700 MMF, 100V, 5%	1002895	8
1	C112	CAP 39 MFD, 10V 10%	1000076	9
7	C100-106	CAP 6.8 MFD, 35V, 10%	1005306	10
1	C115	CAP 120.0 MMF, 100V, 5%	1000018	11
10	D1-10	DIODE D664	1100114	12
4	E1-4	IC DEC 8838	1911117	13
2	E5,11	IC DEC 7430	1905578	14
1	E6	IC DEC 74150	1910153	15
8	E7-10,33-36	IC DEC 8266	1909934	16
4	E12-15	IC DEC 74194	1910623	17
3	E16,22,28	IC DEC 74153	1909937	18
5	E17,75,79,85,91	IC DEC 7402	1909004	19
3	E18,19,21	IC DEC 74S158	1910549	20
7	E20,29,57,74,96,98,99	IC DEC 7400	1905575	21
2	E23,62	IC DEC 74157	1910655	22
4	E24-27	IC DEC 74181	1909982	23
2	E30,89	IC DEC 7437	1910091	24
1	E31	IC DEC 74182	1910019	25
1	E32	IC DEC 1808 UART	1910459	26
4	E37-40	IC DEC 7489	1910396	27
9	E41,46,50,51,70,71,73,80,81	IC DEC 74H01-1	1909849	28
4	E42,45,60,84	IC RES NETWORK	1311003-02	29
1	E47	IC DEC 7408	1910155	30
3	E48,55,58	IC DEC 74175	1910651	31
2	E49,67	IC DEC 74174	1910652	32
1	E44	IC ROM (CONSTANTS)	23A01A1	33
5	E52,86,90,93,97	IC DEC 7474	1905547	34
1	E53	IC ROM (DOP AUX)	23A02A1	35
1	E54	IC ROM (SOP AUX #1)	23A03A1	36
2	E58,87	IC DEC 7404	1909686	37
1	E59	IC ROM (DOP IR)	23A05A1	38
1	E61	IC DEC 7410	1905576	39
1	E65	IC ROM (CC OR OP)	23A04A1	40
1	E66	IC ROM (SOP AUX #2)	23A06A1	41
1	E68	IC DEC 7486	1910011	42
1	E69	IC ROM (C + V - BIT)	23A12A1	43
1	E72	IC ROM (BRANCH)	23A03A2	44
2	E76,100	IC DEC 9602	1910951	45
1	E77	IC ROM (ENB UNARY)	23A10A1	46
1	E78	IC ROM (NOT DOP)	23A08A1	47
1	E83	IC ROM (ODD BYTE EQ 0)	23A11A1	48
2	E88,95	IC DEC 74197	1910035	49
1	E92	IC DEC 7413	1909989	50
1	E94	IC DEC 7473	1905587	51
1	J1	CONNECTOR, BERG	1209941	52
1	R5	RES 1.5K 1/4W 5%	1300391	53
2	R13,14	RES 470 1/4W 5%	1300316	54
2	R19,20	RES 12K 1/2W 5%	1300487	55
2	R15,16	RES 1.5K 1/2W 5%	1300394	56
1	R22	RES 10 1/4W 5%	1301317	57
2	R3,25	RES 30K 1/4W 5%	1302394	58
1	R10	RES 150 1/4W 5%	1300250	59
1	R17	RES 68 1/2W 10%	1300220	60
1	R2	RES 2K 1/4W 5%	1302388	61
1	R21	RES 20K 3/4W 10% POT	1309143-11	62
6	R1,6-9,23	RES 1K 1/4W 5%	1300365	63
1	R4	RES 750 1/4W 5%	1301401	64
1	R12	RES 82 1/4W 5%	1301477	65
1	R18	RES 560 1/2W 5%	1300338	66
2	R11,24	RES 10K 1/4W 5%	1300479	67
2	Q1,2	TRANS DEC 6534D PNP	1503409	68
12		EYELETS	9006732	69
1		MODULE HANDLE	1210711-2	70
1	S1	SWITCH,ROT 1 POLE 10 POSITION DRY	1210042-1	71
1		HEX NUT NYLON	9007992	72
1	C117	CAP 120MMF 100V 5%	1000021	73

DEC 9602	8	16
ROM 23AXXA1	8	16
ROM 23AXXA2	8	16
DEC 7473	4	11
DEC9602	8	16
IC TYPE	GND	+ 5V

GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE

IC PIN LOCATIONS

FIRST USED ON OPTION MODEL: 11/05

ETCH BOARD REV: C

PARTS LIST

REV	CHANGE NO.	REVISIONS	CHK

DEC NO. | EIA NO. | DEC NO. | EIA NO.

SEMICONDUCTOR CONVERSION CHART

		DATE
DRN.	[illegible]	11/18/73
CHK'D.		12/3/73
ENG.		12/20/73
PROJ. ENG.		12/26/73
PROD.		12/26/73

NEXT HIGHER ASSY: B-DD-KD11-B

SCALE: ++

SHEET 3 OF

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: DATA PATHS

SIZE D | CODE CS | NUMBER M7260-0-1 | REV. N

DIST.

DEC FORM NO. DRD 135A

N | M7260-0-1 | CS | D

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

CONG SP WRITE H FC1 — 74Ø0 E022 — Ø3 — DPA ENAB SWITCH REG H
CONE ALLOW CONSTANTS L FV1 — 7420 E029 — DPA SP WRITE H
CONE ENAB WRITE STATUS L — 7400 E029 — DPA SP WRITE L
CONG PROC CLOCK H

EXTA SWITCH REG Ø3 H BERG CC
EXTA SWITCH REG Ø2 H BERG AA
EXTA SWITCH REG Ø1 H BERG Y
EXTA SWITCH REG ØØ H BLERG W

DPE NEG (1) H — 74H01 E051 — Ø3
DPE ZERO (1) H — 74H01 E051
DPE VBIT (1) H — 74H01 E051 — Ø8
CONG ENAB PSN H CP2 — 74H01 E051 — Ø6
DPE COUT (1) H — 74H01 E051

EØ45 +5V: 12, 6, 10, 7

DPA ALEG Ø3 L
DPA ALEG Ø2 L
DPA ALEG Ø1 L
DPA ALEG ØØ L

CONF CIN H ET2 — 74Ø2 E017 — Ø2
DPE COUT (1) L — Ø3 — Ø1
74Ø6 E068 — Ø3 — 13
EØ45 +5V: 3
XXXX 74/82 E031 — 12 — Ø3 Ø4
DPA ALU CIN Ø1 H
DPA ALU CIN ØØ H
DPA Ø-7=Ø H

8266 E036 SWITCH REG MUX: A3 B3 A2 B2 A1 B1 AØ BØ; S1 SØ; Ø1 Ø2 Ø3 Ø4 Ø7 Ø9; 15 14 6 5 10 11 13 12
DPA SP WRITE H
DPA ENAB SWITCH REG H

7489 E040 SAM: N E; D3 D2 D1 DØ; M3(1) M2(1) M1(1) MØ(1); A3 A2 A1 AØ
DPA AMUX Ø3 H CR1 — Ø4
DPA AMUX Ø2 H CP2 — 12
DPA AMUX Ø1 H CP1 — Ø6
DPA AMUX ØØ H CN2 — 10
Ø5 Ø7 11 Ø9
13 14 15 Ø1
CONB SPA Ø3 H CA1
CONB SPA Ø2 H CB1
CONB SPA Ø1 H CC1
CONB SPA ØØ H CD1

74/181 E027 ALU: A=B COUT G P; B3 A3 B2 A2 B1 A1 BØ AØ; S3 S2 S1 SØ M CIN; f3 f2 f1 fØ
18 19 21 2 22 23 1 Ø2
Ø3 Ø4 Ø5 Ø6 Ø8 Ø7
13 11 1Ø Ø9
DPA ALU S3 H
DPA ALU S2 H
DPA ALU S1 H
DPA ALU SØ H
CONF ALU MODE H DB1
DPA ALU CIN ØØ H

BUS LØ3 L AE1 — 8838 EØØ4 — Ø1 — Ø3
BUS LØ2 L AD1 — 8838 EØØ4 — 15 — 13
BUS LØ1 L AD2 — 8838 EØØ4 — 12 — 10
BUS LØØ L AC1 — 8838 EØØ4 — Ø4 — Ø6
8838 EØØ4 — 11
8838 EØØ4 — Ø5
8838 EØØ4 — 9 — 7

CONG DATENAB L FV2

8266 EØ10: B3 A3 B2 A2 B1 A1 BØ AØ; S1 SØ; f3 f2 f1 fØ
Ø2 Ø1 14 15 Ø5 Ø6 11 10
Ø7 Ø9
Ø3 13 11 1Ø Ø4 12
DPA AMUX Ø3 H
DPA AMUX Ø2 H
DPA AMUX Ø1 H
DPA AMUX ØØ H
CONA ENAB ALU H FD2

8266

S1	SØ	fn
L	L	Bn
L	H	An
H	L	Bn
H	H	Ø

DPB BREG Ø4 (1) H
CONG BMODE ØØ H CV1
CONG BMODE Ø1 H DA1
1Ø Ø9 Ø2 — S1 SØ SR

74194 E015 BREG: D3 D2 D1 DØ; R3(1) R2(1) R1(1) RØ(1); CLR CLK SL
DPA AMUX Ø3 H — Ø3
DPA AMUX Ø2 H — Ø4
DPA AMUX Ø1 H — Ø5
DPA AMUX ØØ H — Ø6
Ø1 11 Ø7
+3V E42 15
DPA PROC CLOCK L
DPE SERIAL SHIFT H EK1
CONB INH +1 L
CONG BOOT H EA1

DPA BREG Ø3(1) H
DPA BREG ØØ(1) H

745158 E021: B3 A3 B2 A2 B1 A1 BØ AØ; E S; f3 f2 f1 fØ
15 Ø3 Ø2 13 14 Ø6 Ø5 1Ø 11 15 Ø1
Ø4 12 Ø7 Ø9
DPA BLEG Ø3 L
DPA BLEG Ø2 L
DPA BLEG Ø1 L
DPA BLEG ØØ L

7404 E056: Ø1 — Ø2 — DPA A1 H

745158

E	S	Fn
H	—	Fn = Ø
L	L	Fn = An
L	H	Fn = Bn

74194

S1	SØ	fn
L	L	HOLD
L	H	SR
H	L	SL
H	H	LOAD

CONF ALU S3 L DN1 — 7437 EØ3Ø — Ø3 — DPA ALU S3 H
CONF ALU S2 L DP2 — 7437 EØ3Ø — 11 — DPA ALU S2 H
CONF ALU S1 L DP1 — 7437 EØ3Ø — Ø6 — DPA ALU S1 H
CONF ALU SØ L DP2 — 7437 EØ3Ø — Ø8 — DPA ALU SØ H
CONV PROC CLOCK H — 7437 EØ89 — Ø3 — DPA PROC CLOCK L
C117 220 MMF

DATA PATH <03:0C>

FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO.	ITEM NO.
11/Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: XXX = .005, XX = .02, X = 1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. M. Rivera DATE 12/27/73
CHK'D DATE 2/7/73
ENG. DATE
PROJ. ENG. DATE
PROD. DATE 2/7/73

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATH (DPA)

NEXT HIGHER ASSY: B-DD-KD11-B
SCALE
SHEET 1 OF

SIZE	CODE	NUMBER	REV.
D	CS	M7260-Ø-1	N

DIST.

REVISIONS: REV. | CHANGE NO. | CHK

FORM NO.

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission

EXTA SWITCH REG Ø7 H BERG MM
EXTA SWITCH REG Ø6 H BERG KK
EXTA SWITCH REG Ø5 H BERG HH
EXTA SWITCH REG Ø4 H BERG EE

DPE TBIT (1) H
CONF -NAB PSW H
DPE PSW Ø5 (1) H
DPE PSW Ø6 (1) H
DPE PSW Ø7 (1) H
74H01 EØ5Ø
EØ45

DPB AREG Ø4 L
DPB AREG Ø5 L
DPB AREG Ø6 L
DPB AREG Ø7 L

CONG ENAB SPA L
DPA SP WRITE L
7489 EØ39 SPM
M3(1) M2(1) M1(1) M0(1)
A3 A2 A1 A0

8266 EØ35 SWITCH REG MUX
DPA SP WRITE H
DPA ENAB SWITCH REG H

CONB SPA Ø3 H
CONB SPA Ø2 H
CONB SPA Ø1 H
CONB SPA Ø0 H

DPE RIGHT SHIFT Ø7 H
CONG BMODE Ø0 H
CONG BMODE Ø1 H

DPB AMUX Ø7 H DK1
DPB AMUX Ø6 H DV1
DPB AMUX Ø5 H DK2
DPB AMUX Ø4 H DV2
74194 EØ14 BREG
S1 S0 SR
CLR CLK SL

+3V E42 15
DPA PROC CLOCK L
DPA BREG Ø3 (1) H
CONG BBOT H

DPB BREG Ø4 (1) H
DPB BREG Ø6 (1) H
DPB BREG Ø7 (1) H
7400 EØ2Ø

DPB BLEG Ø7 L
DPB BLEG Ø6 L
DPB BLEG Ø5 L
DPB BLEG Ø4 L

DPB ALU CIN Ø2 H
CARRY 74182 EØ31
DPA Ø-7=Ø H
74181 EØ26 ALU
A=B COUT G P
S3 S2 S1 S0 M CIN

DPA ALU S3 H
DPA ALU S2 H
DPA ALU S1 H
DPA ALU S0 H
CONF ALU MODE H
DPA ALU CIN Ø1 H

BUS DØ7 L AH2
BUS DØ6 L AE1
BUS DØ5 L AE2
BUS DØ4 L AE1
8838 EØD3

CONC DAT ENAB L
8266 EØD9
DPB AMUX Ø7 H
DPB AMUX Ø6 H
DPB AMUX Ø5 H
DPB AMUX Ø4 H

CONA ENAB ALU H

23-ADA1 EØ44
M0(1) M1(1) M3(1) M2(1) M6(1) M7(1) M4(1) M5(1)
DPB ALEG Ø7 L
DPB ALEG Ø6 L
DPB ALEG Ø5 L
DPB ALEG Ø4 L
DPA ALEG Ø3 L
DPA ALEG Ø2 L
DPA ALEG Ø1 L
DPA ALEG Ø0 L
CONSTANTS
ENB

CONB SPA Ø0 H
CONB SPA Ø1 H
CONB SPA Ø2 H
CONB SPA Ø3 H
CONG SP WRITE H
CONE ALLOW CONSTANTS L CE1

DATA PATH <Ø7:Ø4>

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: XXX = .005, XX = .02, X = .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. M. Brine DATE 12/5/72
CHK'D DATE 2/23/73
ENG. DATE 2/23/73
PROJ. ENG. DATE 2/23/73
PROD. DATE 2/23/73
NEXT HIGHER ASSY. B-DD-KD11-B
SCALE
SHEET 5 OF

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE
DATA PATHS
(DPB)

SIZE D | CODE CS | NUMBER M726Ø-Ø-1 | REV. M
DIST.

REVISIONS: REV | CHANGE NO | CHK
BRUNING 40-522 15840
DEC. FORM NO. DRD 102-B

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission

EXTA SWITCH REG 11 H — BERG K
EXTA SWITCH REG 10 H — BERG H
EXTA SWITCH REG 09 H — BERG E
EXTA SWITCH REG 08 H — BERG C

E042 +5V
14 — DPC ALEG 11 L
13 — DPC ALEG 10 L
11 — DPC ALEG 09 L
9 — DPC ALEG 08 L

CONG ENAB SPL L — CF2
DPA SP WRITE L

8266 E038 SPM REG MUX
7489 E038 SPM
M3(1) M2(1) M1(1) M0(1)
A3 A2 A1 A0

DPA SP WRITE H — 07
DPA ENAB SWITCH REG H — 09

CONB SPA 03 H
CONB SPA 02 H
CONB SPA 01 H
CONB SPA 00 H

DPD BREG 12 (1) H
CONG BMODE 00 H
CONG BMODE 01 H

DPC AMUX 11 H — CK1
DPC AMUX 10 H — CK2
DPC AMUX 09 H — CK1
DPC AMUX 08 H — CK2

74S194 E013 BREG
SL SR
CLR CLK SL

DPC BREG 08 (1) H
DPC BREG 11 (1) H

74S158 E019 BLEG MUX
BLEG 11 L
BLEG 10 L
BLEG 09 L
BLEG 08 L

+3V E42 15
DPA PROC CLOCK L
DPB BREG 07 (1) H
DPA +1 H
CONG BTOP H — CL2

DPC ALU CIN 03 H
CARRY 74182 E031
E042 +5V
DB1
DPC B-15=00 H

74181 ALU E025
A=B COUT G P
S3 S2 S1 S0 M CIN

DPA ALU S3 H
DPA ALU S2 H
DPA ALU S1 H
DPA ALU S0 H
CONF ALU MODE H
DPB ALU CIN 02 H

BUS DI1 L — AK2 — 8838 E002
BUS DI0 L — AH1 — 8838 E002
BUS DB? L — AH2 — 8838 E002
BUS DBA L — AH1 — 8838 E002

CONC DAT ENAB L
8838 E002

8266 E008
DPC AMUX 11 H
DPC AMUX 10 H
DPC AMUX 09 H
DPC AMUX 08 H

CONA ENAB ALU H

E043
CONSTANTS
CONB SPA 00 H
CONB SPA 01 H
CONB SPA 02 H
CONB SPA 03 H
CONG SP WRITE H
DPD ALEG 15 L
DPD ALEG 14 L
DPD ALEG 13 L
DPD ALEG 12 L
DPD ALEG 11 L
DPC ALEG 10 L
DPC ALEG 09 L
DPC ALEG 08 L
ENB
CONE ALLOW CONSTANTS L

DATA PATH <11:00>

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: XXX = .005, XX = .02, X = .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. — DATE 12/17/72
CHK'D. — DATE 2/9/73
ENG. — DATE 2/12/73
PROJ. ENG. — DATE 2/12/73
PROD. — DATE 2/12/73
NEXT HIGHER ASSY — B-CU-KD11-B
SCALE
SHEET 6 OF

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATHS (DPC)

SIZE D | CODE CS | NUMBER M726Ø-Ø-1 | REV. M
DIST.

REVISIONS: REV. | CHANGE NO | CHK

BRUNING 40-522 15840
DEC-X9M-NG
DRD 102-B

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission

EXTA SWITCH REG 15 H BERG U
EXTA SWITCH REG 14 H BERG S
EXTA SWITCH REG 13 H BERG P
EXTA SWITCH REG 12 H BERG M

CONG ENAB SPL L
DPA SP WRITE L

7489 E037 SPM

COMB SPA Ø3 H
COMB SPA Ø2 H
COMB SPA Ø1 H
COMB SPA ØØ H
DPE SERIAL SHIFT H
CONG BMODE ØØ H
CONG BMODE Ø1 H

74194 E012 BREG

DPD AMUX 15 H CH1
DPD AMUX 14 H CH2
DPD AMUX 13 H CH1
DPD AMUX 12 H CF1

+3V E42 15
DPA PROC CLOCK L
DPA BREG 11(1) H
DPB BREG Ø7(1) H
DPA +1 H
CONG STOP H

E042 1.5V

8266 EØ33

DPD ALEG 15 L
DPD ALEG 14 L
DPD ALEG 13 L
DPD ALEG 12 L
DPD A15 L

DPA SP WRITE H
DPA ENAB SWITCH REG H
DPD BREG 15 (1) H
DPD BREG 14 (1) H
DPD BREG 12 (1) H

74S158 EØ18 BLEG MUX

DPD BLEG 15 L
DPD BLEG 14 L
DPD BLEG 13 H
DPD BLEG 12 H

DPC B-15=Ø H

74181 EØ24 ALU

DPA ALU S3 H
DPA ALU S2 H
DPA ALU S1 H
DPA ALU SØ H
CONF ALU MODE H
DPC ALU CIN Ø3 H

BUS DI5 L AM2
BUS DI4 L AL1
BUS DI3 L AL2
BUS DI2 L AK1

8838 EØØ1

COMC DAT ENAB L

8266 EØØ7 AMUX

CONA ENAB ALU H

DPD AMUX 15 H
DPD AMUX 14 H
DPD AMUX 13 H
DPD AMUX 12 H

DATA PATH <15:12>

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN. Jim Pepe DATE 11/27/72
CHK'D. DATE 12/23/72
ENG. DATE 12/23/72
PROJ. ENG. DATE 12/23/72
PROD. DATE 12/23/72
NEXT HIGHER ASSY B-DD-KDII-B
SCALE —
SHEET 7 OF

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATHS (DPD)

SIZE D | CODE CS | NUMBER M7260-0-1 | REV. M

REVISIONS	CHANGE NO	CHK	REV

DRAWING 40-522 15840
DEC FORM NO. DRD 102-B

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

74157 EØ62 — CC MUX

DPE NEG H
DPA AMUX Ø3 H
DPE SET Z H
DPA AMUX Ø2 H
DPE SET V H
DPA AMUX Ø1 H
DPF SET COUT H
DPA AMUX ØØ H
CONF AUX CONTROL L

E	S	fn
H	–	fn = Ø
L	L	fn = An
L	H	fn = Bn

74175 EØ56

DPE NEG (1) H
DPE ZERO (1) H
DPE VBIT (1) H
CLK CLK

CONG LOAD PSW L
CONJ PROC CLOCK H
DM2
+3V E45 Ø1
DPF C CLK L
CONH PROC INIT L
DL2

74ØØ EØ57 | 74ØØ EØ57 | 74ØØ EØ57 | 74ØØ EØ57

D 1 7474 COUT EØ52 C Ø

DPE COUT (1)H
DPE COUT (Ø)H

DPA BLEG ØØ L
DPA BREG ØØ (1)H
DPD BLEG 15 L
DPD BREG 15 (1)H
DPA ALUS1 H
DPA ALUSØ H

74ØØ EØ57 | 74Ø2 EØ17 | 74Ø2 EØ17

DPE L SHIFT SIGN H

STB1 STBØ — 74153 ROT MUX 2 EØ22

ASL ROL ASR ROR | S1 SØ

DPE ROT NEG H
DPE SERIAL SHIFT H

STB1 STBØ — 74153 ROT MUX EØ16

DPE ROT COUT H

DPD BLEG 14 L
DPD BLEG 13 L
DPD BLEG 12 L
DPC BLEG 11 L
DPC BLEG 1Ø L
DPC BLEG Ø9 L
DPC BLEG Ø8 L
DPB BLEG Ø7 L
DPB BLEG Ø6 L
DPB BLEG Ø5 L
DPB BLEG Ø4 L
DPA BLEG Ø3 L
DPA BLEG Ø2 L
DPA BLEG Ø1 L

74ØØ EØ11 | 74Ø2 EØ17 | 74ØØ EØ25 | 74Ø4 EØ33

DPG BYTE H
DPF ROTATE H

S1	SØ	FUNCTION
L	L	ROR
L	H	ASR
H	L	ROL
H	H	ASL

STB1 STBØ — 74153 ROT CC MUX EØ28

DPB AMUX Ø7 H
DPD AMUX 15 H
DPA Ø-7=Ø H
DPE Ø-15=Ø H
DPE NEG H
DPE SET Z H

STB — 74150 EØØ6 CONSOLE MUX

DPD BLEG 15 L
DPD BLEG 14 L
DPD BLEG 13 L
DPD BLEG 12 L
DPC BLEG 11 L
DPC BLEG 1Ø L
DPC BLEG Ø9 L
DPC BLEG Ø8 L
DPB BLEG Ø7 L
DPB BLEG Ø6 L
DPB BLEG Ø5 L
DPB BLEG Ø4 L
DPA BLEG Ø3 L
DPA BLEG Ø2 L
DPA BLEG Ø1 L
DPA BLEG ØØ L
S3 S2 S1 SØ

EXTA SCAN ADDRS Ø1 (1)H BERG N
EXTA SCAN ADDRS Ø2 (1)H BERG L
EXTA SCAN ADDRS Ø4 (1)H BERG J
EXTA SCAN ADDRS Ø8 (1)H BERG D
BERG F
DPE DAK H

74175 EØ55 PSW 7:4

DPB AMUX Ø7 H — DPE PSW Ø7 (1)H, DPE PSW Ø7 (Ø)H
DPB AMUX Ø6 H — DPE PSW Ø6 (1)H, DPE PSW Ø6 (Ø)H
DPB AMUX Ø5 H — DPE PSW Ø5 (1)H, DPE PSW Ø5 (Ø)H
DPB AMUX Ø4 H — DPE TBIT (1)H
CLR CLK
CONH PROC INIT L

+3V E45 Ø1
DPF LOAD IR L
D 1 7474 T DEL EØ52 C Ø — FS2 DPE T DEL (1)L

DPA PROC CLOCK L
CONG LOAD PSW L
74Ø2 EØ75 | 74Ø2 EØ75 | 74Ø2 EØ75 | 74Ø2 EØ75
CONA ENAB ALU H
CON H PROC INIT H
DM1
7437 EØ89 — BERG T, DPE PUP L
C116 1000 MMF

DPC BREG ØB H
DPE SERIAL SHIFT H
DPD BREG 14 (1)H
DPB BREG Ø6 (1)H

74157 EØ23 BYTE MUX — DPE RIGHT SHFT Ø7 H, DPE L SHIFT SIGN H

CONF AUX BYTE H DN2

DPA Ø-7=Ø H
DPC 8-15=Ø H
74ØØ EØ74 | 74ØØ EØ78 — DPE Ø-15=Ø H

PSW

REVISIONS	REV.	CHANGE NO.	CHK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .ØØ5, .XX = .Ø2, X = .1 — ANGLES: ±Ø° 3Ø'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH
NEXT HIGHER ASSY: B-DD-KD11-B

DRN. M. Rice DATE 11/3/72
CHK DATE 12/23/72
ENG DATE 12/23/72
PROJ. ENG. DATE 12/23/72
PROD DATE 12/23/72

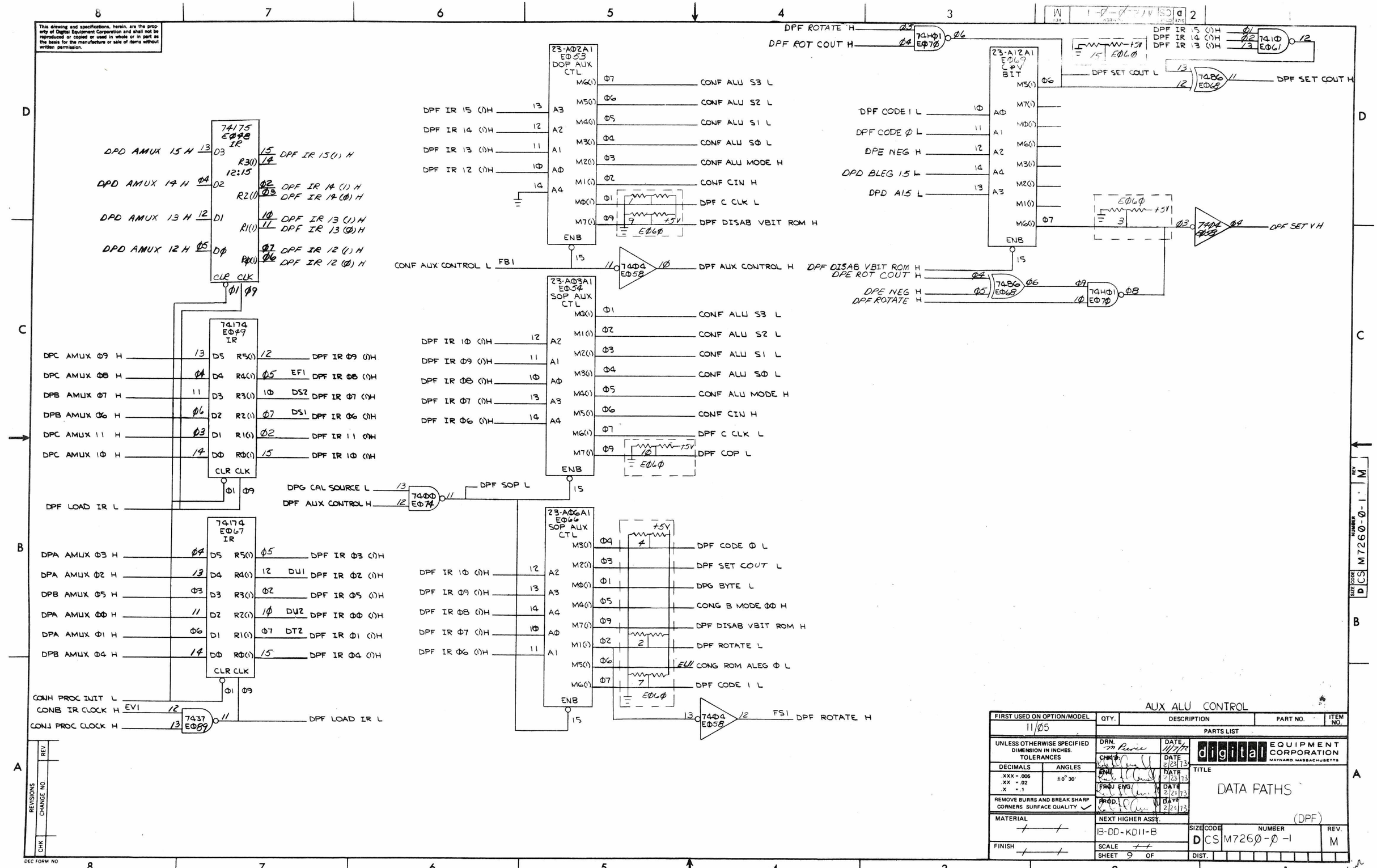
digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: DATA PATHS (DPE)

SIZE D | CODE CS | NUMBER M726Ø-Ø-1 | REV. N
SCALE
SHEET 8 OF
DIST.

DEC FORM NO DRD 102-B

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



AUX ALU CONTROL

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005	±Ø° 3Ø'
.XX = .02	
.X = .1	

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

FINISH —

DRN. Ja Peirce	DATE 11/7/72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D	DATE 2/23/73	
ENG	DATE 2/23/73	
PROJ ENG	DATE 2/23/73	
PROD.	DATE 2/25/73	

TITLE: DATA PATHS (DPF)

NEXT HIGHER ASSY: 13-DD-KD11-B

SCALE —

SHEET 9 OF

SIZE	CODE	NUMBER	REV.
D	CS	M726Ø-Ø-1	M

DIST.

REVISIONS	REV
CHANGE NO.	
CHK	

DEC FORM NO DRD 102-B

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

23-AØ5A1 EØ59

CONE BUT DESTINATION L — DH1 — 14 A4
DPF IR 12 (1)H — 13 A3
DPF IR 13 (1)H — 12 A2
DPF IR 14 (1)H — 11 A1
DPF IR 15 (1)H — 10 AØ

EØ64 +5V
M2(1) ØØ3 — 18 — DPG CAL SOURCE L
M6(1) Ø7 — 12 — EH1 DPG MOVE L
M3(1) Ø4 — EK1 DPG BYTE L
M4(1) Ø5 — 5 — DPG CMP+BIT L
M7(1) Ø9 — DPF CODE Ø L
M1(1) Ø2 — CONF ALU S0 L
MØ(1) Ø1 — CONF ALU S2 L
M5(1) Ø6 — 6 — EJ1 DPG DIS ALU S BITS H
ENB — 15

23-AØ3A2 EØ72

DPF IR 15 (1)H — 15 A7
DPF IR 10 (1)H — ØØ3 A4
DPF IR ØØ (1)H — Ø1 A6
DPF IR Ø9 (1)H — Ø2 A5
DPE NEG (1)H — Ø7 A2
DPE ZERO (1)H — Ø5 AØ
DPE VBIT (1)H — Ø4 A3
DPE COUT (1)H — Ø6 A1
ENB1 ENBØ — 14 13

MØ(1) — 12 — CONF MPC ØØ4 L
M3(1) — ØØ9 — CONF MPC ØØ3 L
M2(1) — 10 — CONF MPC ØØ2 L
M1(1) — 11 — CONF MPC ØØ1 L

CONE JMP OR JSR L — EM2 — 14 A4
DPG SWAB L — 13 A3
DPG JMP L — 12 A2
DPG JMPORJSR L — 11 A1
DPG CAL DEST L — 10 AØ

23-A1ØA1 EØ77

M7(1) — Ø9 — EL1 CONF MPC ØØ L
MØ(1) — Ø1 — ES1 CONF MPC Ø7 L
M1(1) — Ø2 — FJ1 CONG CKOFF L
M2(1) — ØØ3 — EB1 CONF MPC Ø5 L
M3(1) — ØØ4 — EC1 CONF MPC ØØ4 L
M4(1) — Ø5 — ED1 CONF MPC ØØ3 L
M5(1) — Ø6 — ER1 CONF MPC ØØ2 L
M6(1) — Ø7 — EP1 CONF MPC ØØ1 L
ENB — 15

CONE ENAB UNARY L — EN1

23-AØ9A1 EØ65

EØ6Ø +5V — 11 — DV1 DPG WAIT L

DPF IR ØØ2 (1)H — 11 A1
DPF IR ØØ1 (1)H — 12 A2
DPF IR ØØØ (1)H — 10 AØ
CONE BUT IR DECODE L — DV2 — 13 A3
DPG CC L — 14 A4

M7(1) — Ø9
M6(1) — Ø7 — CONF MPC Ø7 L
M5(1) — Ø6 — CONF MPC Ø6 L
M4(1) — Ø5 — CONF MPC Ø5 L
M3(1) — Ø4 — CONF MPC Ø4 L
M2(1) — ØØ3 — CONF MPC Ø3 L
M1(1) — Ø2 — CONF MPC Ø2 L
MØ(1) — Ø1 — CONF MPC Ø1 L
ENB — 15

23-AØ8A1 EØ78

DPF IR 15 (1)H — 10 AØ
DPF IR ØØ8 (1)H — 13 A3
DPF IR Ø9 (1)H — 12 A2
DPF IR 10 (1)H — 11 A1
DPF IR 11 (1)H — 14 AØ

EØ87 +5V
M4(1) — Ø5 — 5 — FUZ DPG EMT L
M3(1) — Ø4 — 4 — FU1 DPG TRAP L
MØ(1) — Ø1 — 1 — EM1 DPG CAL DEST L
M1(1) — Ø2 — 2 — DPG JMP OR JSR L
M5(1) — Ø6 — 2K A2, 1K A1 +5V — DPG BYTE L
M2(1) — ØØ3 — 3 — DPG CAL BRANCH L
M7(1) — Ø9 — 9 — DPG ODD BYTE=Ø L
M6(1) — Ø7 — 7 +5V — DPG S4 L
EØ84
ENB — 15

CONE BUT DESTINATION H — EE1
DPF IR ØØ3 (1)H
DPF IR Ø4 (1)H
DPF IR Ø5 (1)H
DPG CMP+BIT L
DPG JMP OR JSR L

74HØ1 EØ73 — Ø1, Ø2 — Ø3 EA1 CONF MPC Ø6 L
74HØ1 EØ73 — 13, 12 — 11 CONF MPC Ø1 L
74HØ1 EØ73 — Ø5, Ø4 — Ø6 CONF MPC Ø2 L
74HØ1 EØ73 — 10, Ø9 — Ø8 CONF MPC Ø3 L
74ØØ EØ74 — Ø8, Ø9 — Ø8
7402 EØ85 — 10, Ø9 — 8
7402 EØ85 — 11, 12 — 13
74ØØ EØ74 — 10, Ø9 — Ø8
74Ø1Ø EØ61 — 11, 13 — Ø8 FT2 DPG ENAB NON MOD H

DPF IR Ø7 (1) H — 10
DPF IR Ø6 (1) H — Ø9

DPG BYTE L — Ø5 — 7404 EØ58 — Ø6 — DPG BYTE H

DPF IR 14(Ø) H — Ø2
DPF IR 13(Ø) H — Ø3
DPF IR 12(Ø) H — Ø5
74/Ø EØ61 — Ø6

23-A11A1 EØ83

EØ84 +5V
MØ(1) — Ø1 — 15 — DPG JMP L
M1(1) — Ø2 — 14 — DPG SWAB L
M3(1) — Ø4 — 13 — DPG CC L
M7(1) — Ø9 — 10 — DPG CC OR OPERATE L
M4(1) — Ø5
M2(1) — Ø3 — DPG JMP OR JSR L
M6(1) — Ø7 — 11 — ES2 DPG RTS L
M5(1) — Ø6 — DPG CAL DEST L
ENB — 15

DPF IR Ø3 (1)H — 12 A2
DPF IR Ø4 (1)H — 11 A1
DPF IR Ø5 (1)H — 10 AØ
DPF IR Ø6 (1)H — 13 A3
DPF IR Ø7 (1)H — 14 A4
DPG ODD BYTE=Ø L

DPG CAL SOURCE L — Ø2
CONE BUT IR DECODE L — Ø3
7402 EØ85 — Ø1

DPF IR Ø9 (1)H
DPF IR 10 (1)H
DPF IR 11 (1)H

74HØ1 EØ71 — Ø1, Ø2 — Ø3 — CONF MPC Ø7 L
74HØ1 EØ71 — 13, 12 — 11 — CONF MPC Ø1 L
74HØ1 EØ71 — Ø5, Ø4 — Ø6 — CONF MPC Ø2 L
74HØ1 EØ71 — 10, Ø9 — Ø8 — CONF MPC Ø3 L

IR DECODE

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. M. Rivera DATE 11/72
CHK'D DATE
ENG. DATE
PROJ. ENG. DATE
PROD. DATE

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: DATA PATHS (DPG)

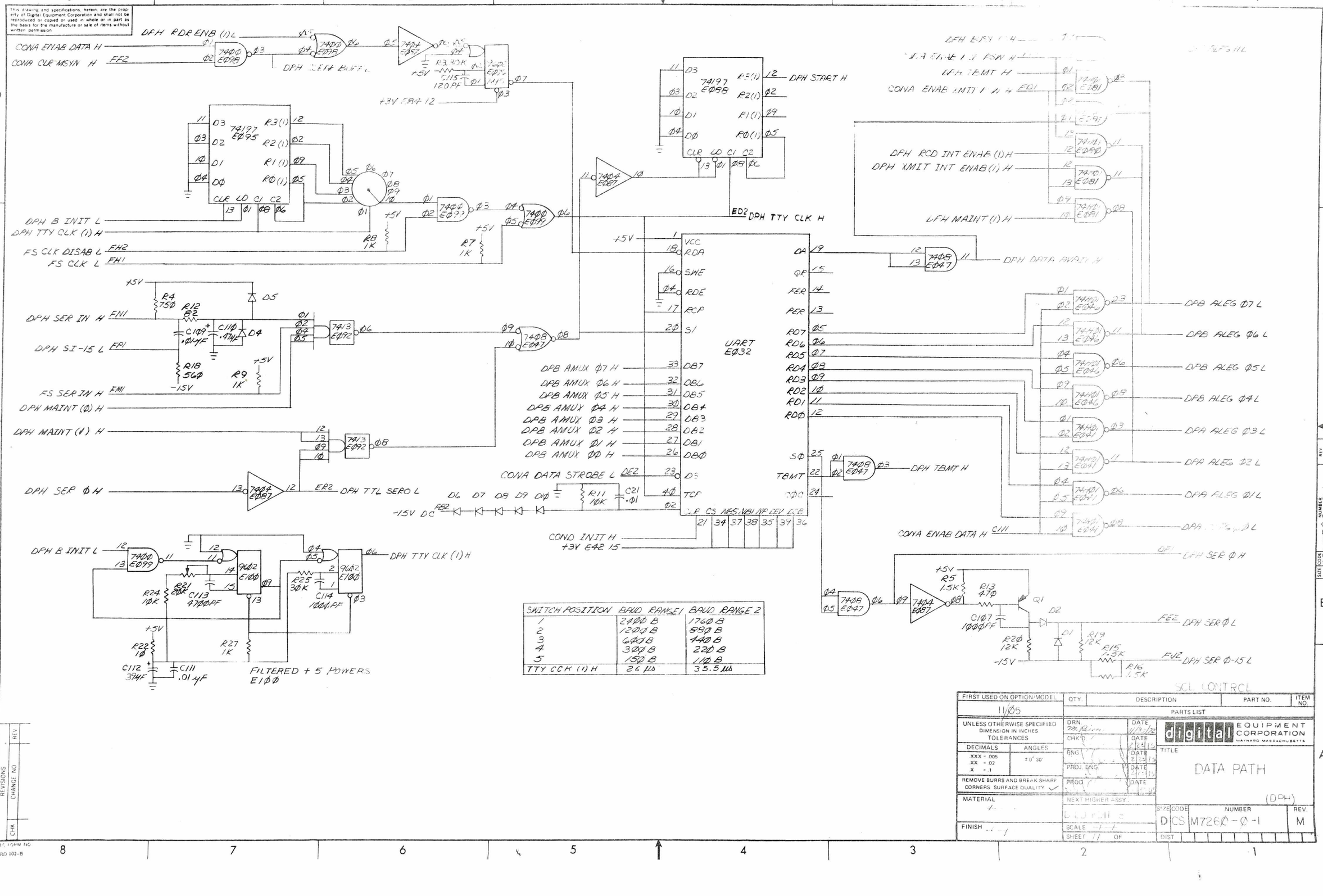
NEXT HIGHER ASSY: B-DD-KD11-B
SCALE
SHEET 10 OF

SIZE D | CODE CS | NUMBER M7260-Ø-1 | REV M
DIST.

REVISIONS: REV | CHANGE NO. | CHK

DEC FORM NO DRD 102-B

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission



SWITCH POSITION	BAUD RANGE 1	BAUD RANGE 2
1	2400 B	1760 B
2	1200 B	880 B
3	600 B	440 B
4	300 B	220 B
5	150 B	110 B
TTY CCK (1) H	26 μs	35.5 μs

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: XXX = 005, XX = 02, X = .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY
MATERIAL
FINISH

DRN. DATE 11/3/72
CHK'D DATE 2/21/73
ENG. DATE 2/21/73
PROJ. ENG. DATE
PROD. DATE
NEXT HIGHER ASSY.
SCALE
SHEET OF

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

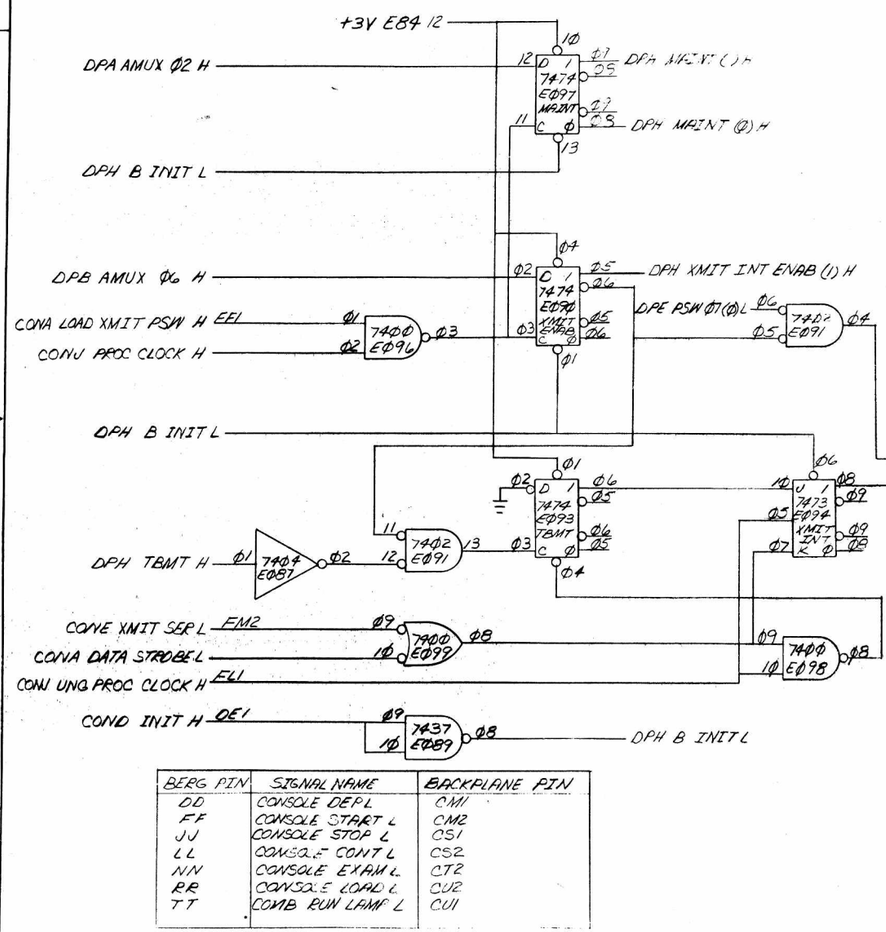
TITLE: DATA PATH (DPH)

SIZE D | CODE CS | NUMBER M7260-0-1 | REV. M

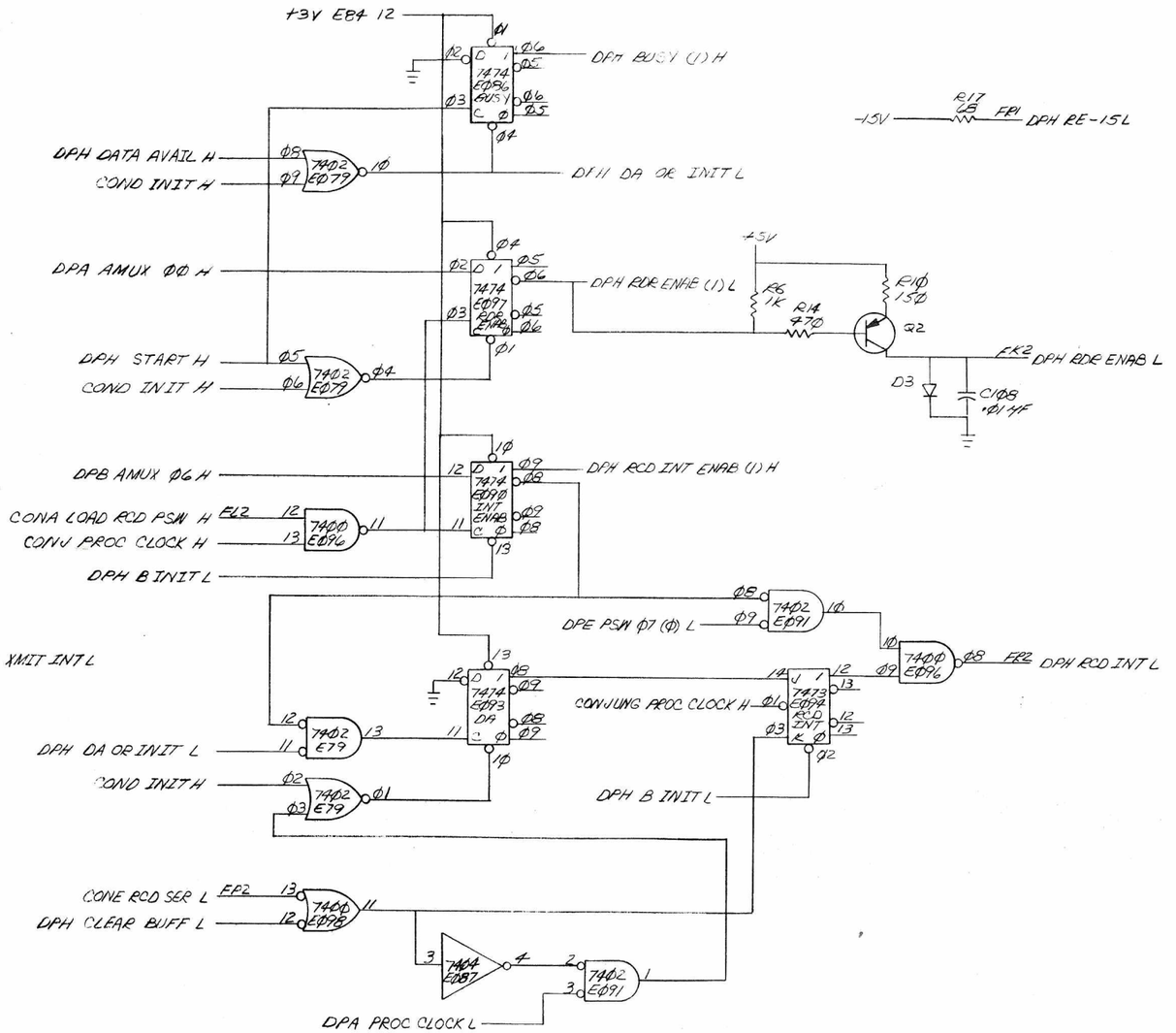
REVISIONS: REV. | CHANGE NO | CHK

DEC FORM NO DRD 102-B

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.


+3V EB4 12
DPA AMUX Ø2 H
DPH MAINT (Ø) H
DPH B INIT L
DPB AMUX Ø6 H
DPH XMIT INT ENAB (I) H
CONA LOAD XMIT PSW H EE1
CONJ PROC CLOCK H
DPE PSW Ø7 (Ø) L
DPH XMIT INT L FM2
DPH TBMT H
CONE XMIT SER L FM2
CONA DATA STROBE L
CONJ UNG PROC CLOCK H EL1
COND INIT H DE1
DPH B INIT L

BERG PIN	SIGNAL NAME	BACKPLANE PIN
DD	CONSOLE DEPL	CM1
FF	CONSOLE START L	CM2
JJ	CONSOLE STOP L	CS1
LL	CONSOLE CONT L	CS2
NN	CONSOLE EXAM L	CT2
RR	CONSOLE LOAD L	CU2
TT	COMB RUN LAMP L	CU1



SCL CONTRL

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
HC		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS .XXX = .005 .XX = .02 .X = .1 ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. DATE 11/3/72
CHK'D DATE 2/7/73
ENG. DATE 2/7/73
PROJ. ENG. DATE
PROD. DATE

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: DATA PATH (DPHI)

NEXT HIGHER ASSY: B-11-K11-B
SCALE
SHEET 12 OF

SIZE	CODE	NUMBER	REV.
D	CS	M7260-C-1	M

DIST

REVISIONS | REV | CHANGE NO | CHK

BRUNING 40.522 15840
DRD 102-B

REV M | NUMBER CS M7260-C-1 | SIZE D CODE

57

...drawing, and specifications, herein, are the propr... Digital Equipment Corporation) and shall not be ...reproduced or copied in whole or in part as ...basis for the manufacture or sale of items without ...written permission.

THIS FACE SHEET CONTAINS THE FOLLOWING CHIP PART NUMBERS

PART NUMBER

23-A01A1

23-A02A1

23-A03A1

23-A04A1

23-A05A1

23-A06A1

23-A08A1

23-A10A1

23-A11A1

23-A12A1

23-A03A2

FIRST USED ON OPTION MODEL
KDII-B

QTY.	DESCRIPTION	PART NO.	ITEM NO.
	PARTS LIST		

DRN. C. Teschner	DATE 5-8-72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D. M. Tidd	DATE 5-15-72	
ENG. M. Tidd	DATE	
PROJ. ENG. M. Tidd	DATE	
PROD. R. Peterson	DATE 5/16/72	
NEXT HIGHER ASSEMBLY B-DD-KDII-B		
SCALE		
SHEET 1 OF 15		

TITLE

DATA PATH
ROM PATTERNS

SIZE	CODE	NUMBER	REV.
K	RL	M7260-0-8	

DIST.

REV.	CHANGE NO.	CHK

FORM NO. 109

```
                        /( =Y8 (PIN #9) DPA ALEG 02 L
                        */( =Y7 (PIN #7) DPA ALEG 03 L
                        **/( =Y6 (PIN #6) DPA ALEG 00 L
                        ***/( =Y5 (PIN #5) DPA ALEG 01 L
                        ****/( =Y4 (PIN #4) DPB ALEG 05 L
                        *****/( =Y3 (PIN #3) DBP ALEG 04 L
                        ******/( =Y2 (PIN #2) DPB ALEG 06 L
                        *******/( =Y1 (PIN #1) DPB ALEG 07 L
  OCTAL  DECIMAL                *********       OCTAL
 ADDRESS ADDRESS    EDCBA       *********       DATA
    000       0     00000       11111111        377
    001       1     00001       01001110        116       K=207 SWR ADDRESS I.E, 177570=000207,BAR
    002       2     00010       01110011        163       K=64 RECVR, VECTOR
    003       3     00011       00001111        017       K=360 CONDITION CODE MASK (CCM=1)
    004       4     00100       10111011        273       K=30 EMT VECTOR
    005       5     00101       00111111        077       K=14 T BIT VECTOR
    006       6     00110       11111111        377
    007       7     00111       11111111        377
    010       8     01000       11111011        373       K=20 IOT VECTOR
    011       9     01001       00111011        073       K=34 TRAP VECTOR
    012      10     01010       11111111        377
    013      11     01011       11111111        377
    014      12     01100       10111111        277       K=10 RESERVED (ILLEGAL) INSTRUCTION VECTOR
    015      13     01101       01111111        177       K=4 BUS ERROR OR STACK OVERFLOW ERROR
    016      14     01110       11111111        377
    017      15     01111       11111111        377
    020      16     10000       01111011        173       K=24 PWR FAIL VECTOR
    021      17     10001       11111111        377
    022      18     10010       11111101        375       K=100 LCLK INT VECTOR
    023      19     10011       11111111        377
    024      20     10100       11111111        377
    025      21     10101       11111111        377
    026      22     10110       11111111        377
    027      23     10111       11111111        377
    030      24     11000       11111111        377
    031      25     11001       11111111        377
    032      26     11010       11111111        377
    033      27     11011       11111111        377
    034      28     11100       11111111        377
    035      29     11101       11110011        363       K=60 TRANSMIT VECTOR
    036      30     11110       11111111        377
    037      31     11111       11111111        377
                    *****
                    ****/( A(PIN #10) IS  CONG SP WRITE H
                    ***/( B(PIN #11) IS  CONG ROM SPA 00 H
                    **/( C(PIN #12) IS  CONG ROM SPA 01 H
                    */( D(PIN #13) IS  CONG ROM SPA 02 H
                    /( E(PIN #14) IS  CONG ROM SPA 03 H
```



```
                        /( =Y8 (PIN #9) DPF DISAB V BIT ROM H
                        */( =Y7 (PIN #7) CONF ALU S3 L
                        **/( =Y6 (PIN #6) CONF ALU S2 L
                        ***/( =Y5 (PIN #5) CONF ALU S1 L
                        ****/( =Y4 (PIN #4) CONF ALU S0 L
                        *****/( =Y3 (PIN #3) CONF ALU MODE H
                        ******/( =Y2 (PIN #2) CONF CIN H
                        *******/( =Y1 (PIN #1) DPF C CLK L
  OCTAL  DECIMAL                *********       OCTAL
 ADDRESS ADDRESS    EDCBA       *********       DATA
    000       0     00000       11111111        377
    001       1     00001       10000101        205       MOV F=A
    002       2     00010       01001010        112       CMP F=A MINUS B MINUS 1
    003       3     00011       10001101        215       BIT F=AB
    004       4     00100       10111101        275       BIC F=A,BARB
    005       5     00101       10100101        245       BIS F=A+B
    006       6     00110       00110000        060       ADD F=A PLUS B
    007       7     00111       11111111        377       RI (RESERVED INSTRUCTION)
    010       8     01000       11111111        377       RI
    011       9     01001       10000101        205       MOV(B)
    012      10     01010       01001010        112       CMP(B)
    013      11     01011       10001101        215       BIT(B)
    014      12     01100       10111101        275       BIC(B)
    015      13     01101       10100101        245       BIS(B)
    016      14     01110       00110010        062       SUB F=A PLUS B
    017      15     01111       11111111        377       RI
    020      16     10000       00000000        000       NOT ACCESSED
    021      17     10001       00000000        000       MOV = NOT ACCESSED
    022      18     10010       00000000        000       CMP = NOT ACCESSED
    023      19     10011       00000000        000       BIT = NOT ACCESSED
    024      20     10100       00000000        000       BIC = NOT ACCESSED
    025      21     10101       00000000        000       BIS = NOT ACCESSED
    026      22     10110       00000000        000       ADD = NOT ACCESSED
    027      23     10111       00000000        000       RI = NOT ACCESSED
    030      24     11000       00000000        000       RI = NOT ACCESSED
    031      25     11001       00000000        000       MOV(B) = NOT ACCESSED
    032      26     11010       00000000        000       CMP(B) = NOT ACCESSED
    033      27     11011       00000000        000       BIT(B) = NOT ACCESSED
    034      28     11100       00000000        000       BIC(B) = NOT ACCESSED
    035      29     11101       00000000        000       BIS(B) = NOT ACCESSED
    036      30     11110       00000000        000       SUB = NOT ACCESSED
    037      31     11111       00000000        000       RI = NOT ACCESSED
                    *****
                    ****/( A(PIN #10) IS  DPF IR 12 (1)H
                    ***/( B(PIN #11) IS  DPF IR 13 (1)H
                    **/( C(PIN #12) IS  DPF IR 14 (1)H
                    */( D(PIN #13) IS  DPF IR 15 (1)H
                    /( E(PIN #14) IS  DPA RUN GND L
```

```
                        /( =Y8 (PIN #9) DPF COP L
                        */( =Y7 (PIN #7) DPF C CLK L
                        **/( =Y6 (PIN #6) CONF CIN H
                        ***/( =Y5 (PIN #5) CONF ALU MODE H
                        ****/( =Y4 (PIN #4) CONF ALU S0 L
                        *****/( =Y3 (PIN #3) CONF ALU S1 L
                        ******/( =Y2 (PIN #2) CONF ALU S2 L
                        *******/( =Y1 (PIN #1) CONF ALU S3 L
  OCTAL DECIMAL                 ********        OCTAL
ADDRESS ADDRESS   EDCBA         ********        DATA
   000      0     00000   11111111        377
   001      1     00001   11111111        377
   002      2     00010   10011100        234     CLR ALUF=ZERO
   003      3     00011   10101001        251     NEG CIN ALUF=A MINUS B MINUS 1
   004      4     00100   10111111        277     ROR
   005      5     00101   11111111        377
   006      6     00110   11111111        377
   007      7     00111   11111111        377
   010      8     01000   11111111        377
   011      9     01001   11111111        377
   012     10     01010   11100000        340     INC CIN ALUF=A ARITH
   013     11     01011   00101111        057     SBC CIN ALUF=A MINUS 1
   014     12     01100   10110111        267     ASR
   015     13     01101   11111111        377
   016     14     01110   11111111        377
   017     15     01111   11111111        377
   020     16     10000   11111111        377
   021     17     10001   11111111        377
   022     18     10010   10010101        225     COM ALUF=NOT B
   023     19     10011   00000000        000     ADC CIN ALUF=A ARITH
   024     20     10100   10111011        273     ROL
   025     21     10101   11111111        377
   026     22     10110   11111111        377
   027     23     10111   11111111        377
   030     24     11000   10011010        232     SWAB NOT B CLOCK LOW
   031     25     11001   11111111        377
   032     26     11010   11001111        317     DEC CIN ALUF=A MINUS 1
   033     27     11011   10010000        220     TST ALUF=AL
   034     28     11100   10110011        263     ASL
   035     29     11101   11111111        377
   036     30     11110   11111111        377
   037     31     11111   11111111        377
                  *****
                  ****/( A(PIN #10) IS  DPF IR Ø8 (1)H
                  ***/( B(PIN #11) IS  DPR IR Ø9 (1)H
                  **/( C(PIN #12) IS  DPF IR 10 (1)H
                  */( D(PIN #13) IS  DPF IR Ø7 (1)H
                  /( E(PIN #14) IS  DPF IR Ø6 (1)H
```



```
                        /( =Y8 (PIN #9) DPG WAIT L
                        */( =Y7 (PIN #7) CONF MPC Ø7 L
                        **/( =Y6 (PIN #6) CONF MPC Ø6 L
                        ***/( =Y5 (PIN #5) CONF MPC Ø5 L
                        ****/( =Y4 (PIN #4) CONF MPC Ø4 L
                        *****/( =Y3 (PIN #3) CONF MPC Ø3 L
                        ******/( =Y2 (PIN #2) CONF MPC Ø2 L
                        *******/( =Y1 (PIN #1) CONF MPC Ø1 L
  OCTAL DECIMAL                 ********        OCTAL
ADDRESS ADDRESS   EDCBA         ********        DATA
   000      0     00000   11001011        313     CC OPR
   001      1     00001   11001011        313     CC OPR
   002      2     00010   11001011        313     CC OPR
   003      3     00011   11001011        313     CC OPR
   004      4     00100   11001011        313     CC OPR
   005      5     00101   11001011        313     CC OPR
   006      6     00110   11001011        313     CC OPR
   007      7     00111   11001011        313     CC OPR
   010      8     01000   11111111        377     RI (RESERVED INSTRUCTION)
   011      9     01001   11111111        377     NOT ACCESSED FOR NOT IR DECODE
   012     10     01010   11111111        377     RI
   013     11     01011   11111111        377     RI
   014     12     01100   11111111        377     RI
   015     13     01101   11111111        377     RI
   016     14     01110   11111111        377     RI
   017     15     01111   11111111        377     RI
   020     16     10000   11101111        357     HALT,BUT IR DEC
   021     17     10001   01100110        146     WAIT,BUT IR DEC
   022     18     10010   10100010        242     IOT
   023     19     10011   10001000        210     RESET
   024     20     10100   10110100        264     RTI
   025     21     10101   11101101        355     BREAKPOINT TRAP DECODE
   026     22     10110   11111111        377     RI
   027     23     10111   11111111        377     RI
   030     24     11000   11111111        377     RI
   031     25     11001   01111111        177     WAIT,BUT IR DEC,BAR
   032     26     11010   11111111        377     RI
   033     27     11011   11111111        377     RI
   034     28     11100   11111111        377     RI
   035     29     11101   11111111        377     RI
   036     30     11110   11111111        377     RI
   037     31     11111   11111111        377     RI
                  *****
                  ****/( A(PIN #10) IS  DPF IR Ø0 (1)H
                  ***/( B(PIN #11) IS  DPF IR Ø2 (1)H
                  **/( C(PIN #12) IS  DPF IR Ø1 (1)H
                  */( D(PIN #13) IS  CONE BUT IR DECODE L
                  /( E(PIN #14) IS  DPG CC L
```

```
                        /( =Y8 (PIN #9) DPF CODE Ø L
                        */( =Y7 (PIN #7) DPG MOVE L
                        **/( =Y6 (PIN #6) DPG DIS ALU S BITS H
                        ***/( =Y5 (PIN #5) DPG CMP OR BIT L
                        ****/( =Y4 (PIN #4) DPG BYTE L
                        *****/( =Y3 (PIN #3) DPG CAL SOURCE L
                        ******/( =Y2 (PIN #2) CONF ALU SØ L
                        *******/( =Y1 (PIN #1) CONF ALU S2 L
  OCTAL DECIMAL                 ********        OCTAL
ADDRESS ADDRESS   EDCBA         ********        DATA
   000      0     00000         11011111        337       BR/CC (BRANCH OR CC OPERATOR)
   001      1     00001         11011111        337       BR/CC
   002      2     00010         11011011        333       BIC
   003      3     00011         11010011        323       BIC(B)
   004      4     00100         11001011        313       CMP
   005      5     00101         11000011        303       CMP(B)
   006      6     00110         01011011        133       ADD
   007      7     00111         01111000        170       SUB DIS ALU BITS H
   010      8     01000         10011011        233       MOV
   011      9     01001         10010011        223       MOV(B)
   012     10     01010         11011011        333       BIS
   013     11     01011         11010011        323       BIS(B)
   014     12     01100         11001011        313       BIT
   015     13     01101         11000011        303       BIT(B)
   016     14     01110         11011111        337       RI TRAP
   017     15     01111         11011111        337       RI TRAP
   020     16     10000         11011111        337       BR/CC
   021     17     10001         11011111        337       BR/CC
   022     18     10010         11011011        333       BIC
   023     19     10011         11010011        323       BIC(B)
   024     20     10100         11001011        313       CMP
   025     21     10101         11000011        303       CMP(B)
   026     22     10110         01011011        133       ADD
   027     23     10111         01011011        133       ADD
   030     24     11000         10011011        233       MOV
   031     25     11001         10010011        223       MOV(B)
   032     26     11010         11011011        333       BIS
   033     27     11011         11010011        323       BIS(B)
   034     28     11100         11001011        313       BIT
   035     29     11101         11000011        303       BIT(B)
   036     30     11110         11011111        337       RI TRAP
   037     31     11111         11011111        337       RI TRAP
                  *****
                  ****/( A(PIN #10) IS  DPF IR 15 (1)H
                  ***/( B(PIN #11) IS  DPF IR 14 (1)H
                  **/( C(PIN #12) IS  DPF IR 13 (1)H
                  */( D(PIN #13) IS  DPF IR 12 (1)H
                  /( E(PIN #14) IS  CONE BUT DESTINATION L
```



```
                        /( =Y8 (PIN #9) DPF DISAB V BIT ROM H
                        */( =Y7 (PIN #7) DPF CODE 1 L
                        **/( =Y6 (PIN #6) CONG ROM ALEG Ø L
                        ***/( =Y5 (PIN #5) CONG B MODE ØØ H
                        ****/( =Y4 (PIN #4) DPF CODE Ø L
                        *****/( =Y3 (PIN #3) DPF SET CARRY L
                        ******/( =Y2 (PIN #2) DPF ROTATE L
                        *******/( =Y1 (PIN #1) DPG BYTE L
  OCTAL DECIMAL                 ********        OCTAL
ADDRESS ADDRESS   EDCBA         ********        DATA
   000      0     00000         11111111        377
   001      1     00001         11111111        377
   002      2     00010         11111111        377
   003      3     00011         10110110        266       SWAB DISAB V BIT ROM
   004      4     00100         11110101        365       ROR
   005      5     00101         11110101        365       ASR
   006      6     00110         11100101        345       ROL
   007      7     00111         11100101        345       ASL
   010      8     01000         10110111        267       CLR
   011      9     01001         00110111        067       INC
   012     10     01010         11110011        363       COM
   013     11     01011         00111111        077       DEC
   014     12     01100         00000001        001       BCC
   015     13     01101         11111111        377
   016     14     01110         11111111        377
   017     15     01111         11111111        377
   020     16     10000         00000001        001       BMI
   021     17     10001         11111111        377
   022     18     10010         11111111        377
   023     19     10011         11111111        377
   024     20     10100         00000001        001       BVS
   025     21     10101         11111111        377
   026     22     10110         11111111        377
   027     23     10111         11111111        377
   030     24     11000         01011111        137       NEG
   031     25     11001         00111111        077       SBC
   032     26     11010         00110111        067       ADC
   033     27     11011         11110111        367       TST
   034     28     11100         11111111        377
   035     29     11101         11111111        377
   036     30     11110         11111111        377
   037     31     11111         11111111        377
                  *****
                  ****/( A(PIN #10) IS  DPF IR Ø7 (1)H
                  ***/( B(PIN #11) IS  DPF IR Ø6 (1)H
                  **/( C(PIN #12) IS  DPF IR 10 (1)H
                  */( D(PIN #13) IS  DPF IR Ø9 (1)H
                  /( E(PIN #14) IS  DPF IR Ø8 (1)H
```

```
                        /( =Y8 (PIN #9) DPG ODD BYTE =  ØL
                        */( =Y7 (PIN #7) DPG 54 L
                        **/( =Y6 (PIN #6) DPG BYTE L
                        ***/( =Y5 (PIN #5) DPG EMT L
                        ****/( =Y4 (PIN #4) DPG TRAP L
                        *****/( =Y3 (PIN #3) DPG CAL BRANCH L
                        ******/( =Y2 (PIN #2) DPG JSR L
                        *******/( =Y1 (PIN #1) DPG CAL DEST L
  OCTAL DECIMAL                 ********        OCTAL
ADDRESS ADDRESS   EDCBA         ********        DATA
   000      0     00000        Ø1111111        177
   001      1     00001        11111011        373       BPL
   002      2     00010        11111011        373       BGE
   003      3     00011        11111011        373       BVC
   004      4     00100        11111011        373       BNE
   005      5     00101        11111011        373       BHI
   006      6     00110        11111011        373       BGT
   007      7     00111        11111011        373       BCC
   010      8     01000        11111011        373       BR
   011      9     01001        11111011        373       BMI
   012     10     01010        11111011        373       BLT
   013     11     01011        11111011        373       BVS
   014     12     01100        11111011        373       BEQ
   015     13     01101        11111011        373       BLOS
   016     14     01110        11111011        373       BLE
   017     15     01111        11111011        373       BCS
   020     16     10000        11111100        374       JSR
   021     17     10001        11101111        357       EMT
   022     18     10010        11111110        376       SOP (CC) ROR/ROL/ASR/ASL
   023     19     10011        11011110        336       OPR (DST) ROR(B)/ROL(B)/ASR(B)/ASL(B)
   024     20     10100        11111110        376       SOP (CC) CLR/COM/INC/DEC
   025     21     10101        11011110        336       OPR(DST) CLR(B)/COM(B)/INC(B)/DEC(B)
   026     22     10110        11111111        377       RI RESERVED INST
   027     23     10111        11111111        377       RI RESERVED INST
   030     24     11000        11111100        374       JSR
   031     25     11001        11110111        367       TRAP
   032     26     11010        11111111        377       RI RESERVED INST
   033     27     11011        11111111        377       RI RESERVED INST
   034     28     11100        10111110        276       SOP NEG/ADC/SBC/TST
   035     29     11101        10011110        236       OPR(DST) NEG(B)/ADC(B)/SBC(B)/TST(B)
   036     30     11110        11111111        377       RI RESERVED INST
   037     31     11111        11111111        377       RI RESERVED INST
                  *****
                  ****/( A(PIN #10) IS  DPF IR 15 (1)H
                  ***/( B(PIN #11) IS  DPF IR 10 (1)H
                  **/( C(PIN #12) IS  DPF IR Ø9 (1)H
                  */( D(PIN #13) IS  DPF IR Ø8 (1)H
                  /( E(PIN #14) IS  DPF IR 11 (1)H
```



```
                        /( =Y8 (PIN #9) CONF MPC Ø0 L
                        */( =Y7 (PIN #7) CONF MPC Ø1 L
                        **/( =Y6 (PIN #6) CONF MPC Ø2 L
                        ***/( =Y5 (PIN #5) CONF MPC Ø3 L
                        ****/( =Y4 (PIN #4) CONF MPC Ø4 L
                        *****/( =Y3 (PIN #3) CONF MPC Ø5 L
                        ******/( =Y2 (PIN #2) CONG CKOFF L
                        *******/( =Y1 (PIN #1) CONF MPC Ø7 L
  OCTAL DECIMAL                 ********        OCTAL
ADDRESS ADDRESS   EDCBA         ********        DATA
   000      0     00000        11111111        377
   001      1     00001        11111111        377
   002      2     00010        11111111        377
   003      3     00011        11111111        377
   004      4     00100        11111111        377
   005      5     00101        11111111        377
   006      6     00110        11111111        377
   007      7     00111        11111111        377
   010      8     01000        11011111        337       JMP BADR TO J=1 @204
   011      9     01001        11111111        377
   012     10     01010        11011111        337       JMP BADR TO J=1 @204
   013     11     01011        11111111        377
   014     12     01100        10101111        257       JSR BADR TO J2=1 @ 212
   015     13     01101        11111111        377
   016     14     01110        11111111        377       NOT JMP OR JSR FALL THRU TO D1=2 @ 200
   017     15     01111        11111111        377
   020     16     10000        11111111        377
   021     17     10001        11111111        377
   022     18     10010        11111111        377
   023     19     10011        11111111        377
   024     20     10100        11111111        377
   025     21     10101        11111111        377
   026     22     10110        11010111        327       SWAB BADR Ø24 INOR NEXT
   027     23     10111        11111111        377
   030     24     11000        01101111        157       JMP BADR Ø11 INOR NEXT
   031     25     11001        11111111        377
   032     26     11010        01101111        157       JMP BADR Ø11 INOR NEXT
   033     27     11011        11111111        377
   034     28     11100        01101111        157       JSR BADR Ø11 INOR NEXT
   035     29     11101        11111111        377
   036     30     11110        11101110        356       SOP BADR 210 INOR NXT
   037     31     11111        11110101        365       UNARY AND NOT JMP,JSR,SWAB
                  *****
                  ****/( A(PIN #10) IS  DPG CAL DEST L
                  ***/( B(PIN #11) IS  DPG JMP  OR JSR L
                  **/( C(PIN #12) IS  DPG JMP L
                  */( D(PIN #13) IS  DPG SWAB L
                  /( E(PIN #14) IS  CONG JMP OR JSR L
```

```
                        /( =Y8 (PIN #9) DPG CC OR OPERATE L
                        */( =Y7 (PIN #7) DPG RTS L
                        **/( =Y6 (PIN #6) DPG CAL DEST L
                        ***/( =Y5 (PIN #5)
                        ****/( =Y4 (PIN #4) DPG CC L
                        *****/( =Y3 (PIN #3) DPG JMP L OR JSR L
                        ******/( =Y2 (PIN #2) DPG SWAB L
                        *******/( =Y1 (PIN #1) DPG JMP L
  OCTAL DECIMAL         ********        OCTAL
ADDRESS ADDRESS  EDCBA  ********        DATA
   000      0   00000  01111111        177     OPR(HALT/WAIT/RTI/BK/IOT/TR)
   001      1   00001  11111111        377     RI
   002      2   00010  11111111        377     RI
   003      3   00011  11111111        377     RI
   004      4   00100  11111111        377     RI
   005      5   00101  11111111        377     RI
   006      6   00110  11111111        377     RI
   007      7   00111  11111111        377     RI
   010      8   01000  11011010        332     JMP MODE Ø
   011      9   01001  11011010        332     JMP MODE 4
   012     10   01010  11011010        332     JMP MODE 2
   013     11   01011  11011010        332     JMP MODE 6
   014     12   01100  11011010        332     JMP MODE 1
   015     13   01101  11011010        332     JMP MODE 5
   016     14   01110  11011010        332     JMP MODE 3
   017     15   01111  11011010        332     JMP MODE 7
   020     16   10000  10111111        277     RTS NOT DPG CC OR OPR L
   021     17   10001  01110111        167     CC OPR 240
   022     18   10010  11111111        377     RI
   023     19   10011  01110111        167     CC OPR 260
   024     20   10100  11111111        377     RI
   025     21   10101  01110111        167     CC OPR 240
   026     22   10110  11111111        377     RI
   027     23   10111  01110111        167     CC OPR 260
   030     24   11000  11011101        335     SWAB MODE Ø
   031     25   11001  11011101        335     SWAB MODE 4
   032     26   11010  11011101        335     SWAB MODE 2
   033     27   11011  11011101        335     SWAB MODE 6
   034     28   11100  11011101        335     SWAB MODE 1
   035     29   11101  11011101        335     SWAB MODE 5
   036     30   11110  11011101        335     SWAB MODE 3
   037     31   11111  11011101        335     SWAB MODE 7
                        *****
                        ****/( A(PIN #1Ø) IS  DPF IR Ø5 (1)H
                        ***/( B(PIN #11) IS  DPF IR Ø4 (1)H
                        **/( C(PIN #12) IS  DPF IR Ø3 (1)H
                        */( D(PIN #13) IS  DPF IR Ø6 (1)H
                        /( E(PIN #14) IS  DPF IR Ø7 (1)H
```



```
                        /( =Y8 (PIN #9)
                        */( =Y7 (PIN #7) DPF SET V L
                        **/( =Y6 (PIN #6) DPF SET COUT L
                        ***/( =Y5 (PIN #5)
                        ****/( =Y4 (PIN #4)
                        *****/( =Y3 (PIN #3)
                        ******/( =Y2 (PIN #2)
                        *******/( =Y1 (PIN #1)
  OCTAL DECIMAL         ********        OCTAL
ADDRESS ADDRESS  EDCBA  ********        DATA
   000      0   00000  11011111        337     INC OR ADC
   001      1   00001  10011111        237     ADD OR SUB
   002      2   00010  10111111        277     DEC OR SBC
   003      3   00011  11111111        377     CMP OR NEG
   004      4   00100  11111111        377     INC OR ADC
   005      5   00101  11011111        337     ADD OR SUB
   006      6   00110  11111111        377     DEC OR SBC
   007      7   00111  11011111        337     CMP OR NEG
   010      8   01000  11111111        377     INC OR ADC
   011      9   01001  11011111        337     ADD OR SUB
   012     10   01010  11111111        377     DEC OR SBC
   013     11   01011  11011111        337     CMP OR NEG
   014     12   01100  10111111        277     INC OR ADC
   015     13   01101  11111111        377     ADD OR SUB
   016     14   01110  11011111        337     DEC OR SBC
   017     15   01111  10011111        237     CMP OR NEG
   020     16   10000  11011111        337     INC OR ADC
   021     17   10001  11011111        337     ADD OR SUB
   022     18   10010  10111111        277     DEC OR SBC
   023     19   10011  10111111        277     CMP OR NEG
   024     20   10100  11111111        377     INC OR ADC
   025     21   10101  11111111        377     ADD OR SUB
   026     22   10110  11111111        377     DEC OR SBC
   027     23   10111  11111111        377     CMP OR NEG
   030     24   11000  11111111        377     INC OR ADC
   031     25   11001  11111111        377     ADD OR SUB
   032     26   11010  11111111        377     DEC OR SBC
   033     27   11011  11111111        377     CMP OR NEG
   034     28   11100  10111111        277     INC OR ADC
   035     29   11101  10111111        277     ADD OR SUB
   036     30   11110  11011111        337     DEC OR SBC
   037     31   11111  11011111        337     CMP OR NEG
                        *****
                        ****/( A(PIN #1Ø) IS  DPF CODE 1 DEL (1)L
                        ***/( B(PIN #11) IS  DPF CODE Ø DEL (1)L
                        **/( C(PIN #12) IS  DPE NEG DEL (1)H
                        */( D(PIN #13) IS  DPD ALEG 15 DEL (1)L
                        /( E(PIN #14) IS  DPD BLEG 15 DEL (1)L
```

```
                                    /( =Y4 (PIN # 9) CONF MPC Ø3 L
                                    +/( =Y3 (PIN #10) CONF MPC Ø2 L
                                    ++/( =Y2 (PIN #11) CONF MPC Ø1 L
                                    +++/( =Y1 (PIN #12) CONF MPC Ø4 L
  OCTAL  DECIMAL                    ++++      OCTAL
ADDRESS ADDRESS   HGFEDCBA          ++++      DATA
    000       0   00000000          1111      017
    001       1   00000001          1111      017
    002       2   00000010          1111      017
    003       3   00000011          1111      017
    004       4   00000100          1111      017
    005       5   00000101          1111      017
    006       6   00000110          1111      017
    007       7   00000111          1111      017
    010       8   00001000          1111      017
    011       9   00001001          1111      017
    012      10   00001010          1111      017
    013      11   00001011          1111      017
    014      12   00001100          1111      017
    015      13   00001101          1111      017       NOT ACCESSED
    016      14   00001110          1111      017
    017      15   00001111          1111      017       ************
    020      16   00010000          0011      003
    021      17   00010001          0011      003
    022      18   00010010          0011      003
    023      19   00010011          0011      003
    024      20   00010100          0101      005
    025      21   00010101          0101      005
    026      22   00010110          0101      005
    027      23   00010111          0101      005
    030      24   00011000          0101      005
    031      25   00011001          0101      005
    032      26   00011010          0101      005
    033      27   00011011          0101      005
    034      28   00011100          0011      003
    035      29   00011101          0011      003       BGE
    036      30   00011110          0011      003
    037      31   00011111          0011      003       ************

    040      32   00100000          0011      003
    041      33   00100001          0101      005
    042      34   00100010          0011      003
    043      35   00100011          0101      005
    044      36   00100100          0011      003
    045      37   00100101          0101      005
    046      38   00100110          0011      003
    047      39   00100111          0101      005
    050      40   00101000          0011      003
    051      41   00101001          0101      005
    052      42   00101010          0011      003
    053      43   00101011          0101      005
    054      44   00101100          0011      003
    055      45   00101101          0101      005       BNE
    056      46   00101110          0011      003
    057      47   00101111          0101      005       ************
    060      48   00110000          0011      003
    061      49   00110001          0101      005
    062      50   00110010          0011      003
    063      51   00110011          0101      005
    064      52   00110100          0101      005
    065      53   00110101          0101      005
    066      54   00110110          0101      005
    067      55   00110111          0101      005
    070      56   00111000          0101      005
    071      57   00111001          0101      005
    072      58   00111010          0101      005
    073      59   00111011          0101      005
    074      60   00111100          0011      003
    075      61   00111101          0101      005       BGT
    076      62   00111110          0011      003
    077      63   00111111          0101      005       ************
                  ++++++++
                  ++++++++/( A(PIN #Ø5) IS  DPE CC ZERO (1)H
                  +++++++/( B(PIN #Ø6) IS  DPE CC COUT (1)H
                  ++++++/( C(PIN #Ø7) IS  DPE CC NEG (1)H
                  +++++/( D(PIN #Ø4) IS  DPE CC VBIT (1)H
                  ++++/( E(PIN #Ø3) IS  DPF IR 10 (1)H
                  +++/( F(PIN #Ø2) IS  DPF IR 09 (1)H
                  ++/( G(PIN #Ø1) IS  DPF IR 0[illegible] (1)H
                  +/( H(PIN #15) IS  DPF IR 15 (1)H
```

```
                                /( =Y4 (PIN # 9) CONF MPC 03 L
                                */( =Y3 (PIN #10) CONF MPC 02 L
                                **/( =Y2 (PIN #11) CONF MPC 01 L
                                ***/( =Y1 (PIN #12) CONF MPC 04 L
  OCTAL DECIMAL                 ****          OCTAL
ADDRESS ADDRESS   HGFEDCBA      ****          DATA
    100      64   01000000      0011          003
    101      65   01000001      0011          003
    102      66   01000010      0011          003
    103      67   01000011      0011          003
    104      68   01000100      0011          003
    105      69   01000101      0011          003
    106      70   01000110      0011          003
    107      71   01000111      0011          003
    110      72   01001000      0011          003
    111      73   01001001      0011          003
    112      74   01001010      0011          003
    113      75   01001011      0011          003
    114      76   01001100      0011          003
    115      77   01001101      0011          003       BR (ALWAYS)
    116      78   01001110      0011          003
    117      79   01001111      0011          003       ************
    120      80   01010000      0101          005
    121      81   01010001      0101          005
    122      82   01010010      0101          005
    123      83   01010011      0101          005
    124      84   01010100      0011          003
    125      85   01010101      0011          003
    126      86   01010110      0011          003
    127      87   01010111      0011          003
    130      88   01011000      0011          003
    131      89   01011001      0011          003
    132      90   01011010      0011          003
    133      91   01011011      0011          003
    134      92   01011100      0101          005
    135      93   01011101      0101          005       BLT
    136      94   01011110      0101          005
    137      95   01011111      0101          005       ************

    140      96   01100000      0101          005
    141      97   01100001      0011          003
    142      98   01100010      0101          005
    143      99   01100011      0011          003
    144     100   01100100      0101          005
    145     101   01100101      0011          003
    146     102   01100110      0101          005
    147     103   01100111      0011          003
    150     104   01101000      0101          005
    151     105   01101001      0011          003
    152     106   01101010      0101          005
    153     107   01101011      0011          003
    154     108   01101100      0101          005
    155     109   01101101      0011          003       BEQ
    156     110   01101110      0101          005
    157     111   01101111      0011          003       ************
    160     112   01110000      0101          005
    161     113   01110001      0011          003
    162     114   01110010      0101          005
    163     115   01110011      0011          003
    164     116   01110100      0011          003
    165     117   01110101      0011          003
    166     118   01110110      0011          003
    167     119   01110111      0011          003
    170     120   01111000      0011          003
    171     121   01111001      0011          003
    172     122   01111010      0011          003
    173     123   01111011      0011          003
    174     124   01111100      0101          005
    175     125   01111101      0011          003       BLE
    176     126   01111110      0101          005
    177     127   01111111      0011          003       ************
                  ********
                  *******/( A(PIN #05) IS  DPE CC ZERO (1)H
                  ******/( B(PIN #06) IS  DPE CC COUT (1)H
                  *****/( C(PIN #07) IS  DPE CC NEG (1)H
                  ****/( D(PIN #04) IS  DPE CC VBIT (1)H
                  ***/( E(PIN #03) IS  DPF IR 10 (1)H
                  **/( F(PIN #02) IS  DPF IR 09 (1)H
                  */( G(PIN #01) IS  DPF IR 08 (1)H
                  /( H(PIN #15) IS  DPF IR 15 (1)H
```

```
                                /( =Y4 (PIN # 9) CONF MPC 03 L
                                */( =Y3 (PIN #10) CONF MPC 02 L
                                **/( =Y2 (PIN #11) CONF MPC 01 L
                                ***/( =Y1 (PIN #12) CONF MPC 04 L
                                ****            OCTAL
  OCTAL DECIMAL                                 DATA
ADDRESS ADDRESS   HGFEDCBA      ****
    200     128   10000000      0011        003
    201     129   10000001      0011        003
    202     130   10000010      0011        003
    203     131   10000011      0011        003
    204     132   10000100      0101        005
    205     133   10000101      0101        005
    206     134   10000110      0101        005
    207     135   10000111      0101        005
    210     136   10001000      0011        003
    211     137   10001001      0011        003
    212     138   10001010      0011        003
    213     139   10001011      0011        003
    214     140   10001100      0101        005
    215     141   10001101      0101        005       BPL
    216     142   10001110      0101        005
    217     143   10001111      0101        005       ************
    220     144   10010000      0011        003
    221     145   10010001      0011        003
    222     146   10010010      0011        003
    223     147   10010011      0011        003
    224     148   10010100      0011        003
    225     149   10010101      0011        003
    226     150   10010110      0011        003
    227     151   10010111      0011        003
    230     152   10011000      0101        005
    231     153   10011001      0101        005
    232     154   10011010      0101        005
    233     155   10011011      0101        005
    234     156   10011100      0101        005
    235     157   10011101      0101        005       BVC
    236     158   10011110      0101        005
    237     159   10011111      0101        005       ************

    240     160   10100000      0011        003
    241     161   10100001      0101        005
    242     162   10100010      0101        005
    243     163   10100011      0101        005
    244     164   10100100      0011        003
    245     165   10100101      0101        005
    246     166   10100110      0101        005
    247     167   10100111      0101        005
    250     168   10101000      0011        003
    251     169   10101001      0101        005
    252     170   10101010      0101        005
    253     171   10101011      0101        005
    254     172   10101100      0011        003
    255     173   10101101      0101        005       BHI
    256     174   10101110      0101        005
    257     175   10101111      0101        005       ************
    260     176   10110000      0011        003
    261     177   10110001      0011        003
    262     178   10110010      0101        005
    263     179   10110011      0101        005
    264     180   10110100      0011        003
    265     181   10110101      0011        003
    266     182   10110110      0101        005
    267     183   10110111      0101        005
    270     184   10111000      0011        003
    271     185   10111001      0011        003
    272     186   10111010      0101        005
    273     187   10111011      0101        005
    274     188   10111100      0011        003
    275     189   10111101      0011        003       BCC
    276     190   10111110      0101        005
    277     191   10111111      0101        005       ************
                  ********
                  ********/( A(PIN #05) IS  DPE CC ZERO (1)H
                  *******/( B(PIN #06) IS  DPE CC COUT (1)H
                  ******/( C(PIN #07) IS  DPE CC NEG (1)H
                  *****/( D(PIN #04) IS  DPE CC VBIT (1)H
                  ****/( E(PIN #03) IS  DPF IR 10 (1)H
                  ***/( F(PIN #02) IS  DPF IR 09 (1)H
                  **/( G(PIN #01) IS  DPF IR 08 (1)H
                  */( H(PIN #15) IS  DPF IR 15 (1)H
```

```
                                    /( =Y4 (PIN # 9) CONF MPC 03 L
                                    */( =Y3 (PIN #10) CONF MPC 02 L
                                    **/( =Y2 (PIN #11) CONF MPC 01 L
                                    ***/( =Y1 (PIN #12) CONF MPC 04 L
  OCTAL DECIMAL                     ****          OCTAL
ADDRESS ADDRESS   HGFEDCBA          ****          DATA
    300     192   11000000          0101          005
    301     193   11000001          0101          005
    302     194   11000010          0101          005
    303     195   11000011          0101          005
    304     196   11000100          0011          003
    305     197   11000101          0011          003
    306     198   11000110          0011          003
    307     199   11000111          0011          003
    310     200   11001000          0101          005
    311     201   11001001          0101          005
    312     202   11001010          0101          005
    313     203   11001011          0101          005
    314     204   11001100          0011          003
    315     205   11001101          0011          003         BMI
    316     206   11001110          0011          003
    317     207   11001111          0011          003         ************
    320     208   11010000          0101          005
    321     209   11010001          0101          005
    322     210   11010010          0101          005
    323     211   11010011          0101          005
    324     212   11010100          0101          005
    325     213   11010101          0101          005
    326     214   11010110          0101          005
    327     215   11010111          0101          005
    330     216   11011000          0011          003
    331     217   11011001          0011          003
    332     218   11011010          0011          003
    333     219   11011011          0011          003
    334     220   11011100          0011          003
    335     221   11011101          0011          003         BVS
    336     222   11011110          0011          003
    337     223   11011111          0011          003         ************

    340     224   11100000          0101          005
    341     225   11100001          0011          003
    342     226   11100010          0011          003
    343     227   11100011          0011          003
    344     228   11100100          0101          005
    345     229   11100101          0011          003
    346     230   11100110          0011          003
    347     231   11100111          0011          003
    350     232   11101000          0101          005
    351     233   11101001          0011          003
    352     234   11101010          0011          003
    353     235   11101011          0011          003
    354     236   11101100          0101          005
    355     237   11101101          0011          003         BLOS
    356     238   11101110          0011          003
    357     239   11101111          0011          003         ************
    360     240   11110000          0101          005
    361     241   11110001          0101          005
    362     242   11110010          0011          003
    363     243   11110011          0011          003
    364     244   11110100          0101          005
    365     245   11110101          0101          005
    366     246   11110110          0011          003
    367     247   11110111          0011          003
    370     248   11111000          0101          005
    371     249   11111001          0101          005
    372     250   11111010          0011          003
    373     251   11111011          0011          003
    374     252   11111100          0101          005
    375     253   11111101          0101          005         BCS
    376     254   11111110          0011          003
    377     255   11111111          0011          003         ************
                  ********
                  *******/( A(PIN #05) IS  DPE CC ZERO (1)H
                  ******/( B(PIN #06) IS  DPE CC COUT (1)H
                  *****/( C(PIN #07) IS  DPE CC NEG (1)H
                  ****/( D(PIN #04) IS  DPE CC VBIT (1)H
                  ***/( E(PIN #03) IS  DPF IR 10 (1)H
                  **/( F(PIN #02) IS  DPF IR 09 (1)H
                  */( G(PIN #01) IS  DPF IR 08 (1)H
                  /( H(PIN #15) IS  DPF IR 15 (1)H
```

PAGE REVISION CONTROL SHEET

SH NO	PAGE REVISIONS						
1	H	J	K	L	M	N	P
2	H	J	K	L	M	M	N
3	H	H	H	H	H	H	H
4	H	H	H	H	H	H	H
5	H	H	J	J	J	J	J
6	H	H	J	J	J	K	K
7	H	H	J	J	J	J	J
8	H	H	H	H	H	H	H
9	H	H	J	J	J	J	J
10	H	J	J	K	L	L	M
11	H	H	J	K	K	K	K
12	H	H	J	J	K	K	K
13	H	H	J	J	K	K	K
14	H	H	H	H	H	H	H

ETCH REV	C	C	E*	E	E	E	E
ECO NO.	5	6	7	8	9	10	11

ENG ORDER

REMARKS

*ETCH REV'D NOT TO BE USED PER ORDER D.E.

FIRST USED ON OPTION/MODEL

This document contains confidential proprietary information of DEC. This information shall not be disclosed to persons outside the employ of DEC, except by DEC personnel so authorized by DEC, and only for use by such other persons in the design, production or manufacture of products for DEC.
Copyright © 1972 Digital Equipment Corporation

DRN.		DATE 8/16/72
CHK'D.		DATE 8/21/72
ENG.		DATE 8/17/72
PROJ. ENG.		DATE 8/17/72
PROD.		DATE 8/21/72

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE CONTROL LOGIC AND MICROPROGRAM

NEXT HIGHER ASSY.

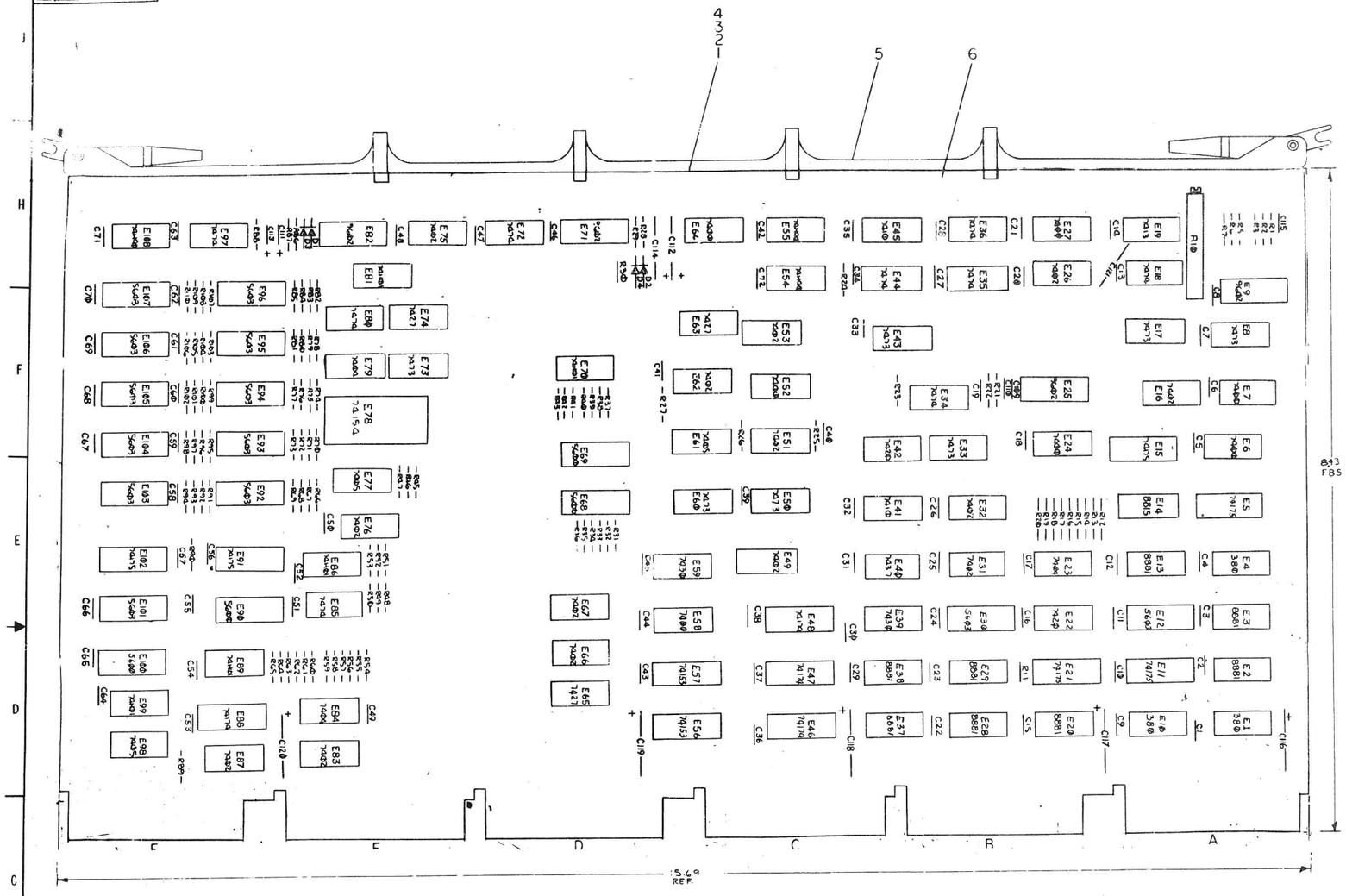
SIZE	CODE	NUMBER	REV.
B	CS	M7261-0-1	P

SCALE

SHEET 1 OF 14

DIST.

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.


4
3
2
1
5
6
8
7
D
5
4
3
2
1
J
H
F
E
C
B
A
C71
C63
E108
E97
E82
E75
E72
E71
E64
E55
E45
E36
E27
E19
C15
R1
R2
R3
R4
R5
R6
R7
C70
C62
E107
E96
E81
E74
E63
E53
E43
E17
E8
C69
C61
E106
E95
E80
E73
E52
E42
E33
E24
E15
E7
C68
C60
E105
E94
E79
E78
74154
E70
E51
E41
E34
E25
E16
E6
C67
C59
E104
E93
E69
E60
E50
E32
E14
E5
C58
E103
E92
E77
E68
E59
E49
E31
E23
E13
E4
C50
E76
E67
E58
E48
E39
E30
E22
E12
E3
C66
C55
E101
E90
E85
E66
E57
E47
E38
E29
E21
E11
E2
C65
C54
E100
E89
E84
E65
E56
E46
E37
E28
E20
E10
E1
C64
E99
E88
E83
C53
E98
E87
C120
C119
C118
C117
C116
C114
C112
R30
R24
R27
R25
C40
C41
C42
C43
C44
C45
C46
C47
C48
C49
C50
C51
C52
C53
C54
C55
C56
C57
C58
C59
C60
C61
C62
C63
C64
C65
C66
C67
C68
C69
C70
C71
C72
C73
C74
C75
C76
C77
C78
C79
C80
C81
C82
C83
C84
C85
C86
C87
C88
C89
C90
C91
C92
C93
C94
C95
C96
C97
C98
C99
C100
C101
C102
C103
C104
C105
C106
C107
C108
C109
C110
C111
C112
C113
C114
C115
R1
R2
R3
R4
R5
R6
R7
R8
R9
R10
R11
R12
R13
R14
R15
R16
R17
R18
R19
R20
R21
R22
R23
R24
R25
R26
R27
R28
R29
R30
R31
R32
R33
R34
R35
R36
R37
R38
R39
R40

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

CONC DATI (1)H — Ø4
CONC ADV ENAB (1)H — Ø5
74H01 E070 — Ø6
R39 2K +5V

Ø1
Ø2
74H01 E070 — Ø3
CONE SET SSYN H — Ø3
Ø2
7402 F066 — Ø1 DE1
R41 470 +5V
CONA ENAB ALU L
CONA ENAB ALU H

74174 EØ48 BA (15,10:8)
DPC AMUX Ø9 H CP2 — 14 D5 R5(1) 15 — CONA BA Ø9 (1) H
DPC AMUX Ø8 H CL2 — Ø6 D4 R4(1) Ø7 — CONA BA Ø8 (1) H
DPC AMUX 10 H CM2 — Ø4 D3 R3(1) Ø5 — CONA BA 10 (1) H
DPD AMUX 15 H CN2 — Ø3 D2 R2(1) Ø2 — CONA BA 15 (1) H
11 D1 R1(1) 10
13 DØ RØ(1) 12
CLR CLK
Ø1 Ø9

74174 EØ46 BA (14,12,7:4)
DPD AMUX 14 H CF2 — Ø3 D5 R5(1) Ø2 — CONA BA 14 (1) H
DPD AMUX 12 H CE2 — 14 D4 R4(1) 15 — CONA BA 12 (1) H
DPB AMUX Ø4 H CD1 — 11 D3 R3(1) 10 — CONA BA Ø4 (1) H
DPB AMUX Ø6 H CE1 — Ø6 D2 R2(1) Ø7 — CONA BA Ø6 (1) H
DPB AMUX Ø7 H CF1 — Ø4 D1 R1(1) Ø5 — CONA BA Ø7 (1) H
DPB AMUX Ø5 H CD2 — 13 DØ RØ(1) 12 — CONA BA Ø5 (1) H
CLR CLK
Ø1 Ø9

CONA BA CLOCK L

74174 EØ47 BA (13,11,03:00)
DPD AMUX 13 H CJ2 — Ø3 D5 R5(1) Ø2 — CONA BA 13 (1) H
DPC AMUX 11 H CA1 — 11 D4 R4(1) 10 — CONA BA 11 (1) H
DPA AMUX ØØ H CK2 — 14 D3 R3(1) 15 — CONA BA ØØ (1) H
DPA AMUX Ø2 H CC1 — Ø6 D2 R2(1) Ø7 — CONA BA Ø2 (1) H
DPA AMUX Ø1 H CB1 — 13 D1 R1(1) 12 — CONA BA Ø1 (1) H
DPA AMUX Ø3 H CH2 — Ø4 DØ RØ(1) Ø5 — CONA BA Ø3 (1) H
CLR CLK
Ø1 Ø9

R19 1K +5V

CONG BA CLOCK H — Ø9
CONJ PROC CLOCK H CN1 — 10 7437 EØ40 Ø8 — CONA BA CLOCK L

CONH RUN GND L

7430 EØ39 — Ø8
Ø3
Ø2
Ø1
Ø5
Ø4
Ø3

23-AØ2A2 EØ30 INTR ADDRS DECODE
Ø3 — A4 A7
15 — Ø1 — A6 A5
Ø2 — A2
Ø7 — A1
Ø5 — AØ
Ø6 — A3
Ø4
M3(1) Ø9 — CONA INTØ H
M2(1) 10 — CONA INT1 H
M1(1) 11 — CONA INT2 H
MØ(1) 12 — CONA INT3 H
14 13
+5V
R16 2K
R2Ø 2K
R18 2K
R17 2K

CONC DATO (1)H — Ø9
CONC ADV ENAB (1)H — 10
74H01 EØ7Ø — Ø8
R38 2K +5V
CONA TRAN OUT L

CONA LOAD MODEM PSW L — 12 11 7402 EØ67 13
CONA ENAB MODEM PSW L — Ø5 Ø6 7402 EØ66 Ø4
CONA XMIT L — Ø9 Ø8 7402 EØ66 10
CONA RECEIVE L — Ø6 Ø5 7402 EØ67 Ø4

CONA TRAN IN L

23-AØ9A1 EØ69 DATI ADDRS DECODE
CONA INTØ H — 14 A4
CONA INT1 H — 11 A1
CONA INT2 H — 12 A2
CONA INT3 H — 13 A3
10 AØ
MØ(1) Ø1 — CONG ENAB PSW L
M1(1) Ø2 — CONG ENAB SPR L
M2(1) Ø3 — CONG ENAB SPL L
M3(1) Ø4 — DF1 CONA ENAB SWITCH REG L
M4(1) Ø5 — CONA ENAB MODEM PSW L
M7(1) Ø9 — CONA ENAB L CLK PSW L
M5(1) Ø6 — CONA ENAB ALU L
M6(1) Ø7 — CONA INT TRAN SYNC L
ENB 15
+5V
R43 2K
R42 2K
R37 2K

23-AØ7A1 EØ68 DATO ADDRS DECODE
CONA INTØ H — 14 A4
CONA INT1 H — 11 A1
CONA INT2 H — 12 A2
CONA INT3 H — 13 A3
10 AØ
MØ(1) Ø1 — DH2 CONG LOAD PSW L
M1(1) Ø2 — CONG SP WRITE L
M3(1) Ø4 — CONA LOAD MODEM PSW L
M2(1) Ø3 — CONA LOAD L CLK PSW L
M5(1) Ø6 — CONA RECEIVE L
M4(1) Ø5 — CONA XMIT L
M6(1) Ø7 — CONA REG ADDR L
M7(1) Ø9 — CONA INT TRAN SYNC L
ENB 15
+5V
R34 2K
R36 2K
R32 2K
R33 2K
R31 2K
R35 2K

CONC CLR MSYN H — DJ1 13 — 74H01 EØ7Ø — 11 DK1 CONA DATA STROBE L
RØØ 2K +5V

7427 EØ65 — Ø3 Ø4 Ø5 — Ø6
CONA TRAN IN L — 11 10 Ø9 — Ø8 — DD1 CONA ENAB DATA H
7402 EØ66 — 12 11 — 13 — DP1 CONA LOAD XMIT PSW H
7402 EØ66 — 9 8 — 10 — DA1 CONA ENAB XMIT PSW L
7402 EØ67 — 3 2 — Ø1 — DR1 CONA LOAD RCD PSW H
7402 EØ67 — 5 6 — Ø4 — DN1 CONA ENAB RCD PSW H

INT ADDR DETECT

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

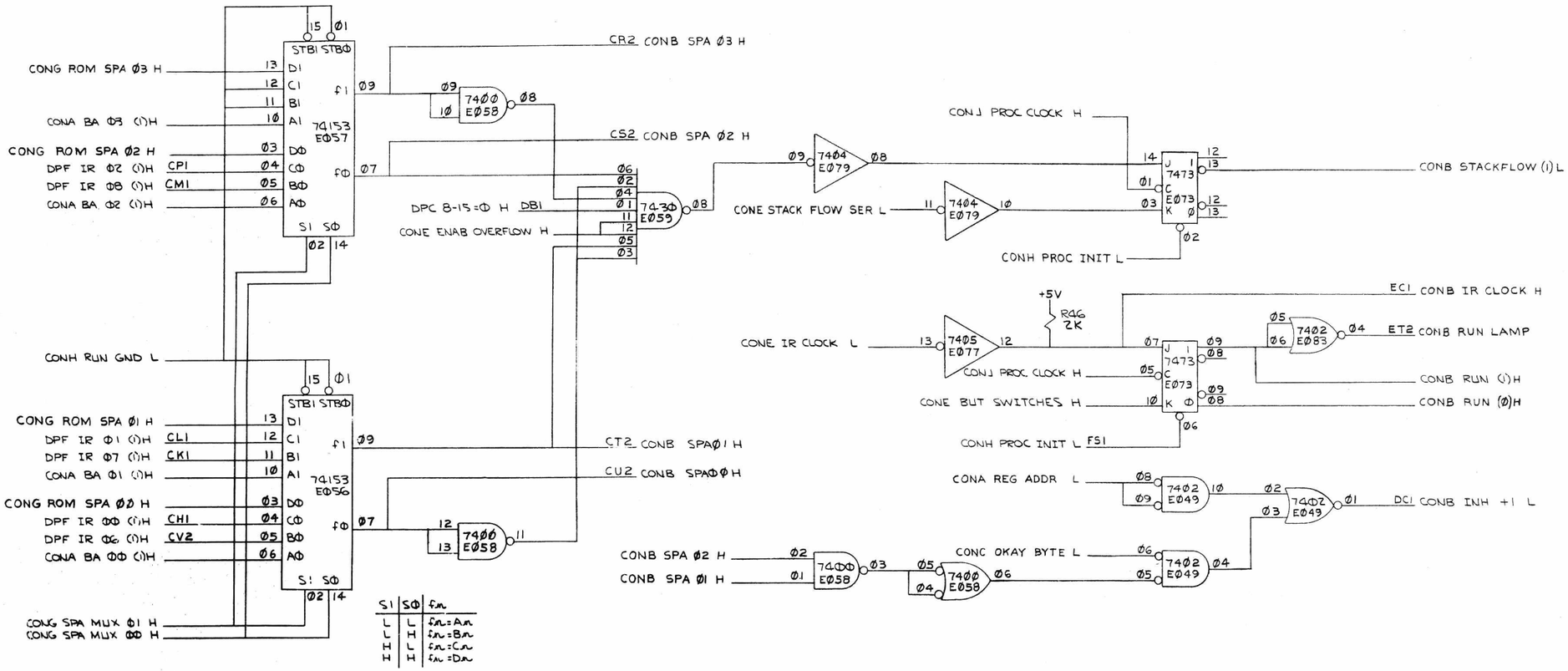
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. W.MAJOR	DATE 2/18/72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D	DATE 4/21/72	
ENG.	DATE 4/26/72	TITLE: CONTROL LOGIC & MICROPROGRAM (CONA)
PROJ. ENG.	DATE 4/26/72	
PROD.	DATE 6/27/72	
NEXT HIGHER ASSY. B-DD-KD11-B	SCALE	SIZE D CODE CS NUMBER M7261-Ø-1 REV. H
	SHEET 3 OF	DIST.

REV | CHANGE NO | CHK

FORM NO 103-B

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



STACKFLOW & SPM

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —/—

FINISH —/—

DRN. W. MAJOR	DATE 2/17/72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D	DATE 4/24/72	
ENG	DATE 4/26/72	
PROJ. ENG.	DATE 4/26/72	
PROD. R.K. Peterson	DATE 4/27/72	
NEXT HIGHER ASSY. B-DD-KD11-B		
SCALE —/—		
SHEET 4 OF		

TITLE: CONTROL LOGIC & MICROPROGRAM (CONB)

SIZE	CODE	NUMBER	REV.
D	CS	M7261-Ø-1	H

DIST.

REVISIONS	REV
CHANGE NO.	
CHK	

DEC FORM NO DRD 102-B

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

CONH RBB H
CONG CKOFF L
CONC BR GRANT H
CONE BUT SERVICE H
74H01 E081
7474 ADV ENAB E080
CONC ADV ENAB (I)H
CONC ADV ENAB (I)L
CONJ PROC CLOCK L
CONH PROC INIT L

CONJ ALLOW PC L
CONG ENAB IN PAUSE L
DPG ENAB NON MOD H EL2
7427 E063
7473 DATIP E008
COND INIT H
CONC DAT ENAB L
CONC DATIP (I)L

CONC SSYN (Φ)H
CONC MSYN (Φ)H
74ΦΦ E052
CONC BBSY (I)H
CONC BBSY (I)L
CONC MSYN (I)H
CONC MSYN (I)L
CONC SET BBSY H
CONG DATI L
74Φ2 E053
7473 DATI E017
CONC D REQ H
CONC DATI (I)H
74Φ2 E016
CONC NPR GRANT H
CONC SACK OR TO DEL (Φ)L
COND BBSY H
8815 E014
CONJ BC CLOCK H
CONC EOT H
7473 BBSY E043
CONJ UNG PROC CLOCK H
7473 MSYN E060
CONC GOOD TRAN L
CONC MSYN OUT H
CONF MPC Φ3 L
CONC CLR MSYN H
CONC BUS ERROR (I)H
CONC ADV ENAB (I)L
COND SSYN H
CONC DATO (I) H
CONA INT TRAN SYNC L
74Φ5 E061
R27 2K +5V
CONC TOTAL SSYN L
COND INIT H
7437 E040
CONC BUS INIT L
CONC DATO (I)L
CONG DATO L
7473 DATO E017
CONC BBSY (I) H
CONC DATIP (I) L
74ΦΦ E007
DMI CONC DAT ENAB L
CONC CΦ H
CONC BUS ERROR H
R25 2K +5V
CONC SET DBE H
CONC DB ERROR H
CONC DAT TO (I)L
CONA BA ΦΦ (I)H
CONC D REQ H
CONA REG ADDR L
7420 E042
7410 E041
CONJ UNG PROC CLOCK H
7473 BE E050
CONC CLR MSYN H
7473 DBE E060
CONF MPC Φ6 L
DPG BYTE L
CONG ALLOW BYTE L
7427 E063
7473 ALLOW BYTE E043
CONC OKAY BYTE L
CONJ BC CLOCK H
CONC EOT H
CONC BUS INIT L
COND INIT H
CONB RUN (Φ)H
7427 E074
CONC GOOD TRAN L
CONC SET DBE H
CONC DB ERROR H
74ΦΦ E052
CONH R88 H
+5V
R23 1K
CONC R23 H
CONJ MAN CLK L
CONC CKOFF (I)H
CONF AUX CONTROL L
CONJ UNG PROC CLOCK L
CONH PROC INIT L
CONC BG RESTART L
CONH CLR CKOFF (I)H
CONC CLR MSYN H
7474 CKOFF E080
CONG CKOFF L
CONJ PROC CLOCK L
CONC CKOFF (Φ)H
CONH RUN GND L
CONC MSYN (I)L
+5V
R22 30K
C109 2200 PF
9602 22 LIS E025
CONC EOT H
COND INIT H
74Φ2 E031
CONC EOT CLR L
7474 DAT TO E034

UNIBUS CONTROL

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: XXX ± .005, XX ± .02, X ± .1; ANGLES: ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. W. MAJOR DATE 5/11/72
CHK'D DATE 9/26/72
ENG. DATE 9/26/72
PROJ. ENG. DATE 9/26/72
PROD. DATE 11/22/72
NEXT HIGHER ASSY. B-DD-KD11-B
SCALE
SHEET 5 OF

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CONTROL LOGIC & MICROPROGRAM (CONC)

SIZE D | CODE CS | NUMBER M7261-0-1 | REV. J
DIST.

REVISIONS: REV | CHANGE NO | CHK

DEC FORM NO DRD 169-B

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

CONC SET NPG H
CONJ BC CLOCK H
CONH RUN GND L
CONC CLR GRANT L
CONC NPG (I) H
CONC NPG (I) L
CONE SET SSYN H
CONJ PROC CLOCK H
COND INIT H
CONE SSYN OUT (I)H
CONH RUN GND L
CONC NPG (I)H
CONC BG L
+5V
R21 30K
C110 100PF
CONC R23 H
CONC TO (I)L
CONC SACK OR TO DEL (I)L
74175 E005
COND NPR H
CONC SACK OR TO (I)H
CONC SACK OR TO DEL (I)H
CONC SACK OR TO DEL (I)L
COND SACK H
CONC TO (I)L
74175 E015
COND INTR H
CONC MSYN (I)H
CONC INTR SYNC (I)H
CONC INTR SYNC (I)L
CONC MSYN DEL (I)L
CONC SACK OR TO (I)H
COND SSYN H
CONC BG L
CONJ BC CLOCK H
CONC SSYN (Ø) H
CONC BUS INIT L
CONJ BC CLOCK L
CONJ UNG PROC CLOCK L
CONC MSYN DEL (I)L
CONC MSYN (Ø)L
CONC SACK OR TO DEL (Ø)H
CONC BG RESTART L
74175 E011 BR
COND BR Ø7 H
COND BR Ø6 H
COND BR Ø5 H
COND BR Ø4 H
DPE PSW Ø7(Ø)H CSR1
DPE PSW Ø6(Ø)H CSI
DPE PSW Ø5(Ø)H CSV1
CONJ L CLK INT L
Z3-AØIA2 E012 PRIORITY
74175 E021 BG
CONC BG Ø7 (I)L
CONC BG Ø6 (I)L
CONC BG Ø5 (I)L
CONC BG Ø4 (I)L
CONC BG H
CONC BG L
CONC CLR GRANT L
CONE BUT SERVICE H
CONJ UNG PROC CLOCK H
CONC BR GRANT H
COND INIT H
CONC SACK OR TO DEL (I)H
CONC SET NPG H
CONC NPG (I)H
CONC NPR GRANT H

PRIORITY ARBITRATION

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN.	W.MAJOR	DATE 11/19/72
DSGN.		DATE 4/26/72
ENG.		DATE 4/26/72
PROJ ENG.		DATE 4/26/72
PROD		DATE 4/27/72

NEXT HIGHER ASSY. B-DD-KD11-B
SCALE —
SHEET 6 OF

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CONTROL LOGIC & MICROPROGRAM (CONC.)

SIZE	CODE	NUMBER	REV.
D	CS	M7261-Ø-1	K

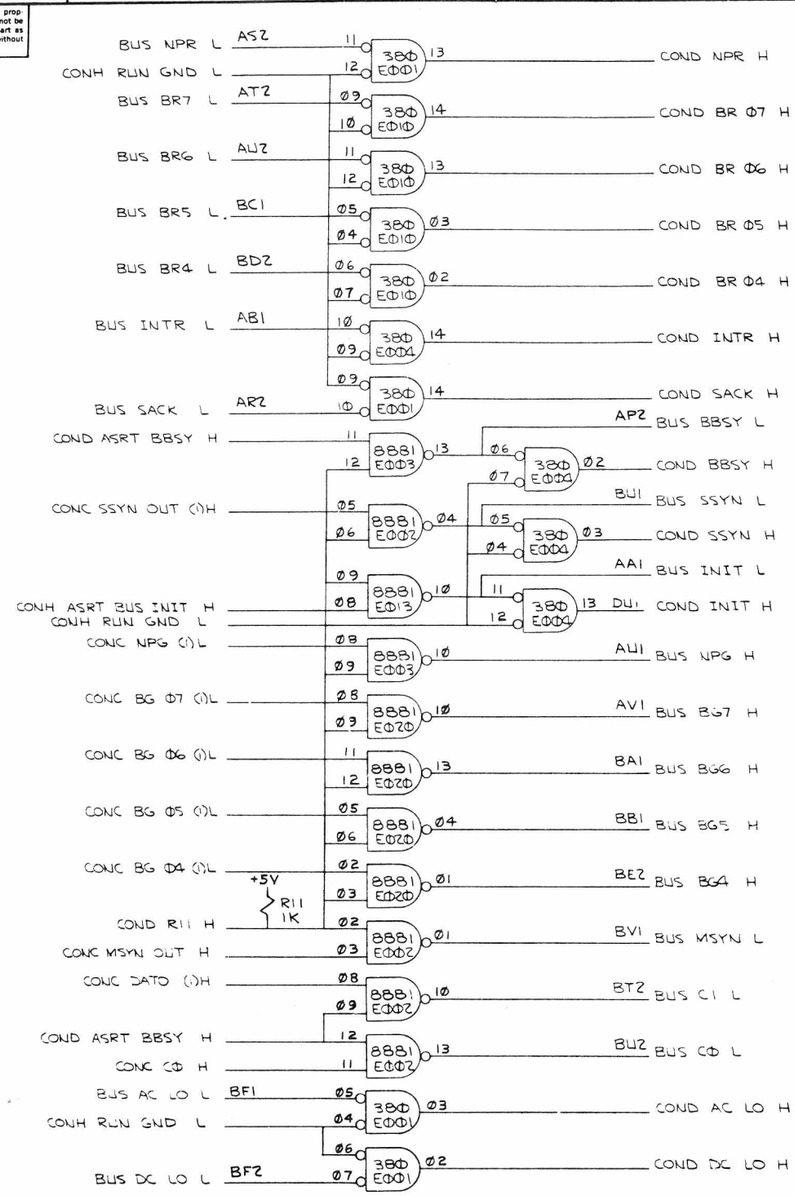
DIST. —

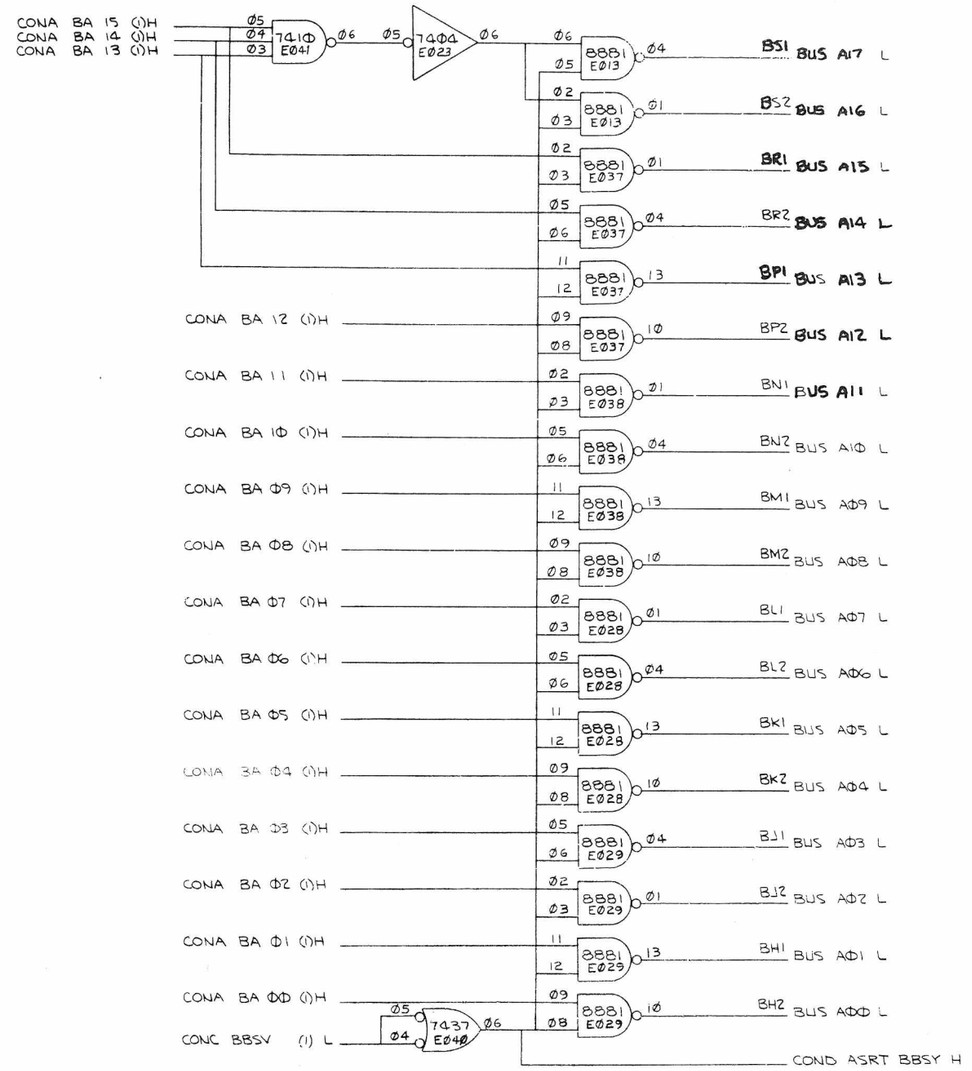
REVISIONS: REV. | CHANGE NO | CHK

DEC FORM NO 1171-B

73

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.




CONA BA 15 (1)H
CONA BA 14 (1)H
CONA BA 13 (1)H
CONA BA 12 (1)H
CONA BA 11 (1)H
CONA BA 10 (1)H
CONA BA Φ9 (1)H
CONA BA Φ8 (1)H
CONA BA Φ7 (1)H
CONA BA Φ6 (1)H
CONA BA Φ5 (1)H
CONA BA Φ4 (1)H
CONA BA Φ3 (1)H
CONA BA Φ2 (1)H
CONA BA Φ1 (1)H
CONA BA ΦΦ (1)H
CONC BBSV (1) L
COND ASRT BBSY H
BS1 BUS A17 L
BS2 BUS A16 L
BR1 BUS A15 L
BR2 BUS A14 L
BP1 BUS A13 L
BP2 BUS A12 L
BN1 BUS A11 L
BN2 BUS AΦ0 L
BM1 BUS AΦ9 L
BM2 BUS AΦ8 L
BL1 BUS AΦ7 L
BL2 BUS AΦ6 L
BK1 BUS AΦ5 L
BK2 BUS AΦ4 L
BJ1 BUS AΦ3 L
BJ2 BUS AΦ2 L
BH1 BUS AΦ1 L
BH2 BUS AΦΦ L

DRIVERS & RECEIVERS

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

FINISH —

DRN. W. MAJOR	DATE 1/14/72	
CHK'D:	DATE 4/72	
ENG.	DATE 4/26/72	
PROJ. ENG.	DATE 4/26/72	
PROD.	DATE 4/27/72	

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CONTROL LOGIC & MICROPROGRAM (COND)

NEXT HIGHER ASSY. B-DD-KD11-B

SCALE —

SHEET 7 OF

SIZE	CODE	NUMBER	REV.
D	CS	M7261-Ø-1	J

DIST.

SIZE D CODE CS NUMBER M7261-Ø-1 REV J

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

CONE SET SSYN H
CONE IR CLOCK L
CONE ENAB OVERFLOW H
CONE BUT INIT H
CONE ENAB UNARY L
CONE BUT NONE L
CONE JMP OR JSR L
CONE BUT IR DECODE L
CONE BUT BYTE L
CONE ALLOW CONSTANTS L
CONE BUT DESTINATION L
CONE BUT MOVE L
CONE BUT INTERRUPT L
CONE BUT INIT L
CONE BUT UNARY L
CONE BUT SWITCHES L
CONE BUT NON MOD L
CONE BUT SERVICE L
CONC BUS ERROR (I)H
CONJ PROC CLOCK L
CONE BUT Ø3 L
CONE BUT Ø2 L
CONE BUT Ø1 L
CONE BUT ØØ L
CONE EXAM SW L
CONE DEP SW L
CONE BUT SWITCHES H
CONJ PROC CLOCK H
CONH PROC INIT L
CONJ UNG PROC CLOCK L
CONSOLE START L
CONSOLE LOAD L
CONSOLE DEP L
CONSOLE EXAM L
CONSOLE CONT L
CONSOLE STOP L
CONE START (I)L
CONE LOAD (I)L
CONE EXAM (I)L
CONE CONT (I)L
CONE DEP (I)L
CONE STOP (I)L
CONE IST EXAM (I)H
CONE IST DEP (I)H
FL2 CONE ASRT INIT H
FL1 CONF MPC Ø6 L
CONE LOAD (I)L
CONE EXAM (I)L
CONE CONT (I)L
CONE DEP (I)L
CONE EXAM SW L
CONF MPC Ø5 L
CONF MPC ØØ L
CONF MPC Ø4 L
CONF MPC Ø2 L
CONF MPC Ø3 L
CONE DEP SW L
CONF MPC Ø1 L
CONE BUT SWITCHES L
CONE BUT SWITCHES H
DPG CAL DEST L
CONE BUT IR DECODE L
CONE BUT DESTINATION L
CONE BUT DESTINATION H
DPG BYTE L
CONE BUT BYTE L
CONF MPC Ø5 L
CONA BA ØØ (I)H
CONE BUT INTERRUPT L
CONC INTR SYNC (I)H
DPG TRAP L
CONE BUT IR DECODE L
DPG EMT L
DPG RTS L
DPG MOVE L
CONE BUT MOVE L
DPG BYTE L
DPG ENAB NON MOD H
CONE BUT NON MOD L
CONF MPC Ø4 L
CONF MPC Ø3 L
CONF MPC Ø2 L
CONF MPC ØØ L
CONF MPC Ø1 L
DPE T DEL (I)L
DPG WAIT L
DPH XMIT INT L
DPH RCD INT L
CONE STOP (I)L
CONI L CLK INT L
CONH PDWN SYNC (I)L
CONB STACKFLOW (I)L
CONF MPC ØØ L
CONF MPC Ø2 L
CONF MPC Ø1 L
CONF MPC ØØ L
CONE NO BG SERV L
CONE BUT SERVICE H
CONE BUT SERVICE L
CONC BR GRANT H
CONH RUN GND L
FBI CONE XMIT SER L
FAI CONE RCD SER L
CONE PWR FAIL SER L
CONE STACK FLOW SER L
CONE L CLK SER L
CONE NO BG SERV L

MICRO BRANCH LOGIC

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS .XXX ± .005, .XX ± .02, .X ± .1 — ANGLES ± 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN. W. MAJOR DATE 2/26/72
CHK'D DATE/ 4/26/72
ENG. DATE 4/26/72
PROJ/ENG. DATE 4/26/72
PROD. DATE 4/27/72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE
CONTROL LOGIC & MICROPROGRAM (CONE)

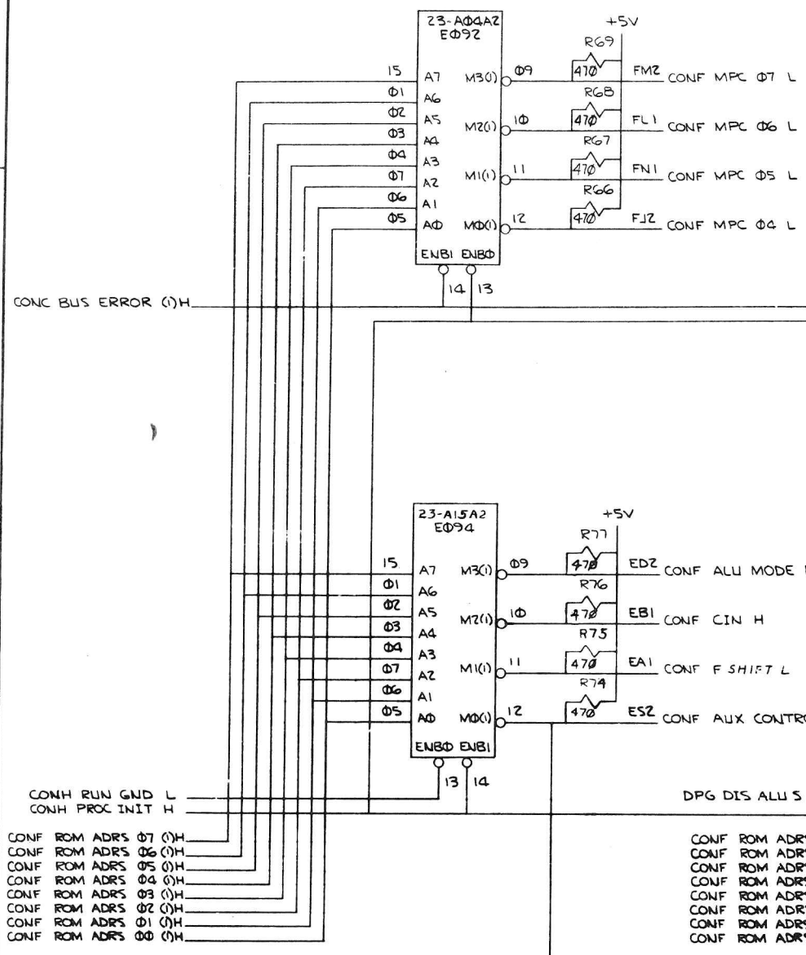
NEXT HIGHER ASSY. B-DD-KD11-B
SCALE —
SHEET 8 OF

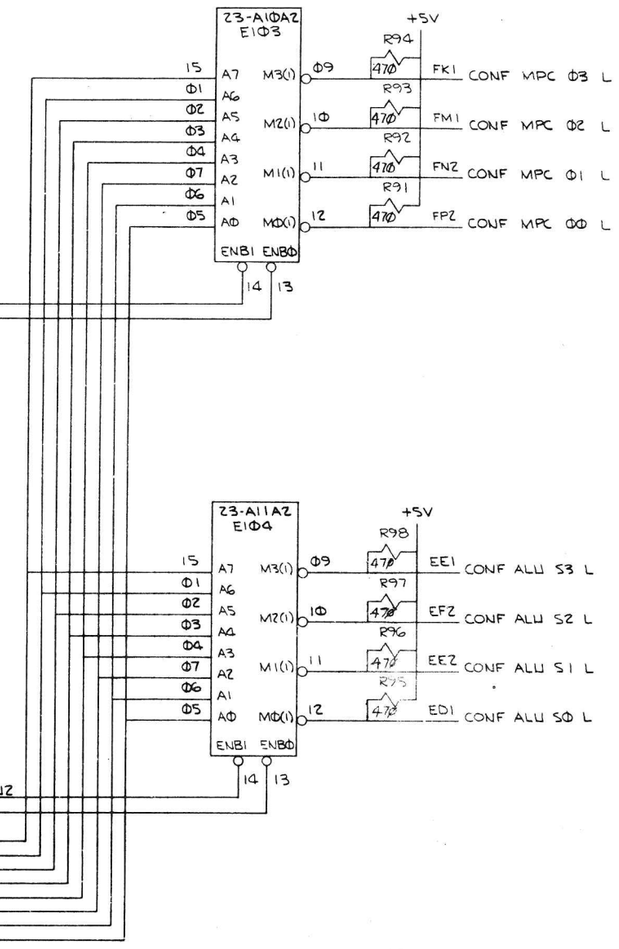
SIZE D | CODE CS | NUMBER M7261-Ø-1 | REV. H
DIST.

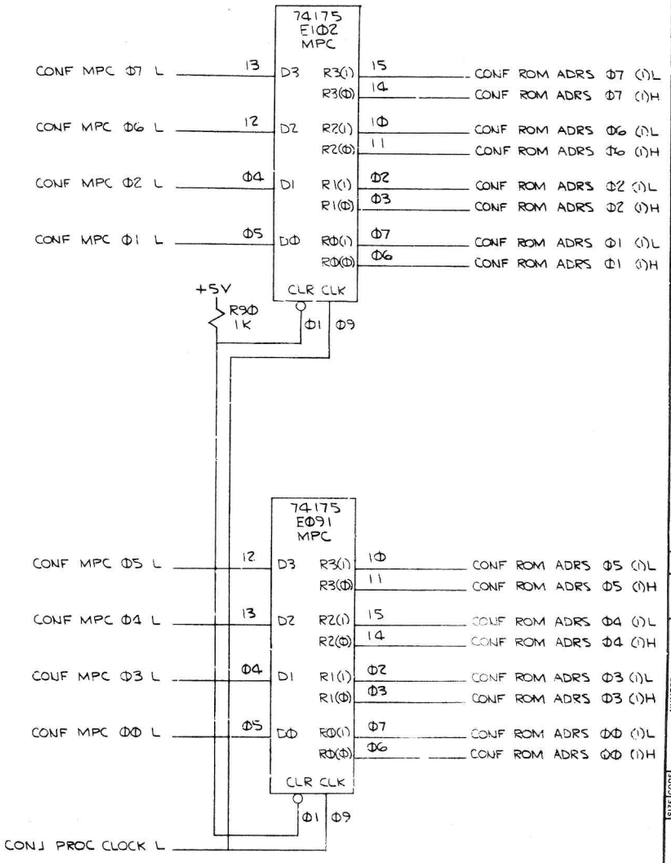
REVISIONS | REV | CHANGE NO | CHK

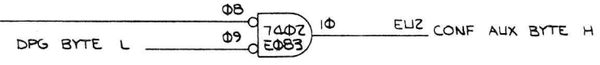
DEC FORM NO DRD 102-B

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.









MICRO PC

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL

FINISH

DRN. W. MAJOR	DATE 2/4/72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D	DATE 4/24/72	
ENG.	DATE 4/24/72	
PROJ. ENG.	DATE 4/24/72	
PROD.	DATE 4/21/72	

TITLE: CONTROL LOGIC & MICROPROGRAM (CONF)

NEXT HIGHER ASSY. B-DD-KD11-B

SCALE

SHEET 9 OF

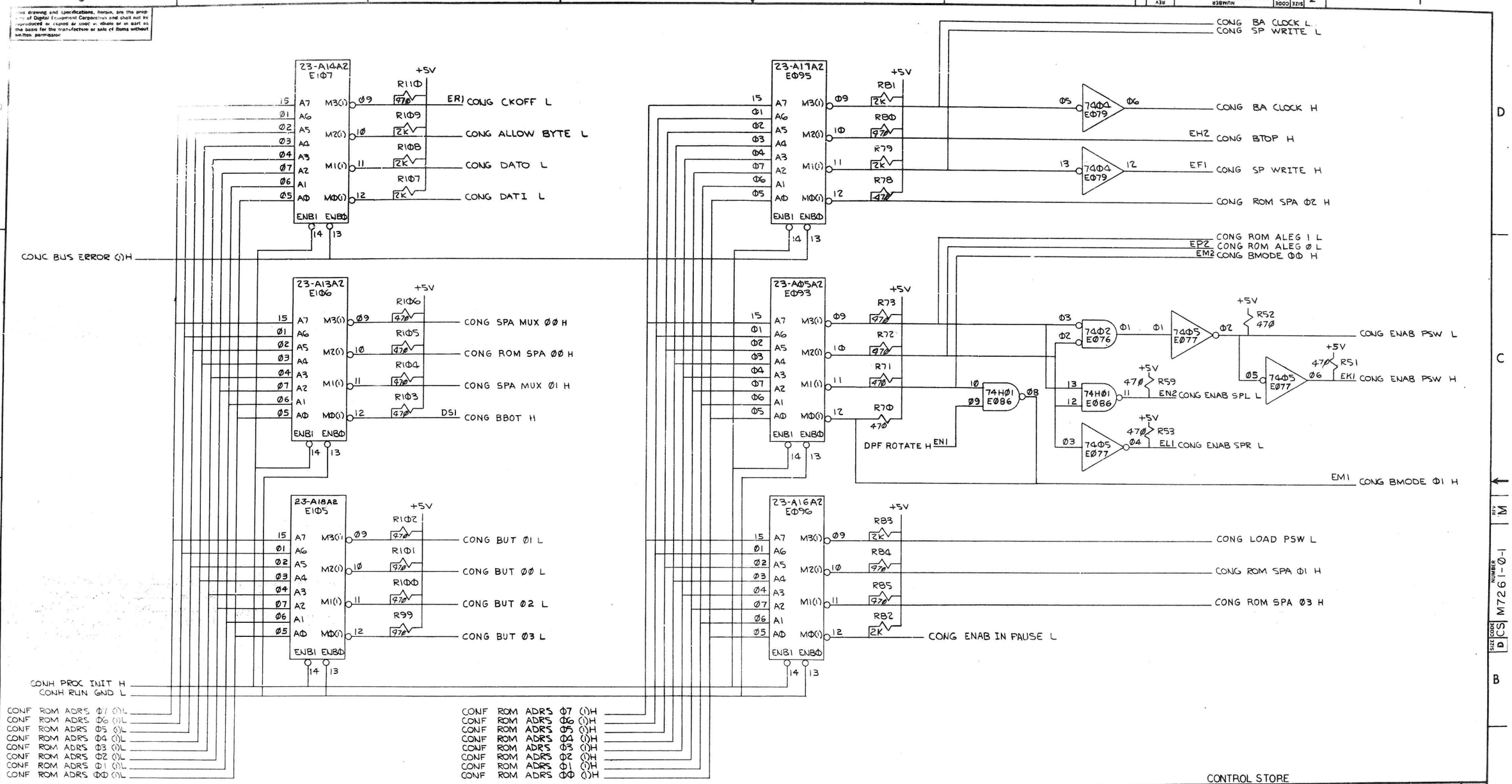
SIZE	CODE	NUMBER	REV
D	CS	M7261-Ø-1	J

DIST.

REVISIONS | REV | CHANGE NO. | CHK

DEC FORM NO. DRD 103-R

...ws drawing and specifications, herein, are the prop... of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



CONTROL STORE

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

FINISH —

DRN. W. MAJOR	DATE 2/15/72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D	DATE 4/24/72	
ENG.	DATE 4/24/72	
PROJ. ENG.	DATE 4/26/72	
PROD.	DATE 4/27/72	

TITLE: CONTROL LOGIC & MICROPROGRAM (CONG)

NEXT HIGHER ASSY. B-DD-KD11-B

SCALE —

SHEET 10 OF

SIZE	CODE	NUMBER	REV.
D	CS	M7261-Ø-1	M

DIST.

REVISIONS: REV | CHANGE NO. | CHK

DEC FORM NO DRD 102-B

ng and specifications, herein, are the prop-
gital Equipment Corporation and shall not be
d or copied or used in whole or in part as
for the manufacture or sale of items without
rmission.

CONE ASRT INIT H
7402 E075
CONSOLE START L
7400 E108
FT2 CONH PROC INIT H
FS1 CONH PROC INIT L
COND DC LO H
CONH PDWN (0)L
7427 E063
9602 50MS INIT E071
R29 30K
C112 15 MFD
CONH INIT (1)H
7474 INIT SYNC E072
CONH INIT SYNC (1)L
CONH PDWN (1)H
+5V R88 1K
CONH R88 H
7474 E097
CONJ UNG PROC CLOCK L
CONH PDWN SYNC (1)L
CONH INIT (1)H
COND AC LO H
CONJ PROC CLOCK L
CONH INIT SYNC (1)L
7400 E064
9602 PUP 2.2MS E082
R86 10K
C111 .68 MFD
D1
COND AC LO H
R87 30K
C113 .68 MFD
D3
9602 6.6MS E082
CONH PDWN (0)H
CONE PWR FAIL SER L
CONJ PROC CLOCK L
CONH PROC INIT H
CONH R88 H
CONJ R24 H
+5V R30 1K
CONE BUT INIT H
R28 30K
C114 10 MFD
D4
9602 22MS E071
CONH RUN GND L
7474 E072
CONH CLR CKOFF (1)H
CONJ E09Ø9 L
7474 CLR CKOFF E044
CONH PDWN SYNC (1)L
CONH PROC INIT L
7400 E064
CONH ASRT BUS INIT H

POWER FAIL

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS .XXX = .005 .XX = .02 .X = .1
ANGLES ±0° 30'.
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN. W. MAJOR DATE 2/7/72
CHK'D DATE 4/24/72
ENG DATE 4/24/72
PROJ. ENG. DATE 4/24/72
PROD DATE 4/27/72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE CONTROL LOGIC & MICROPROGRAM (CONH)

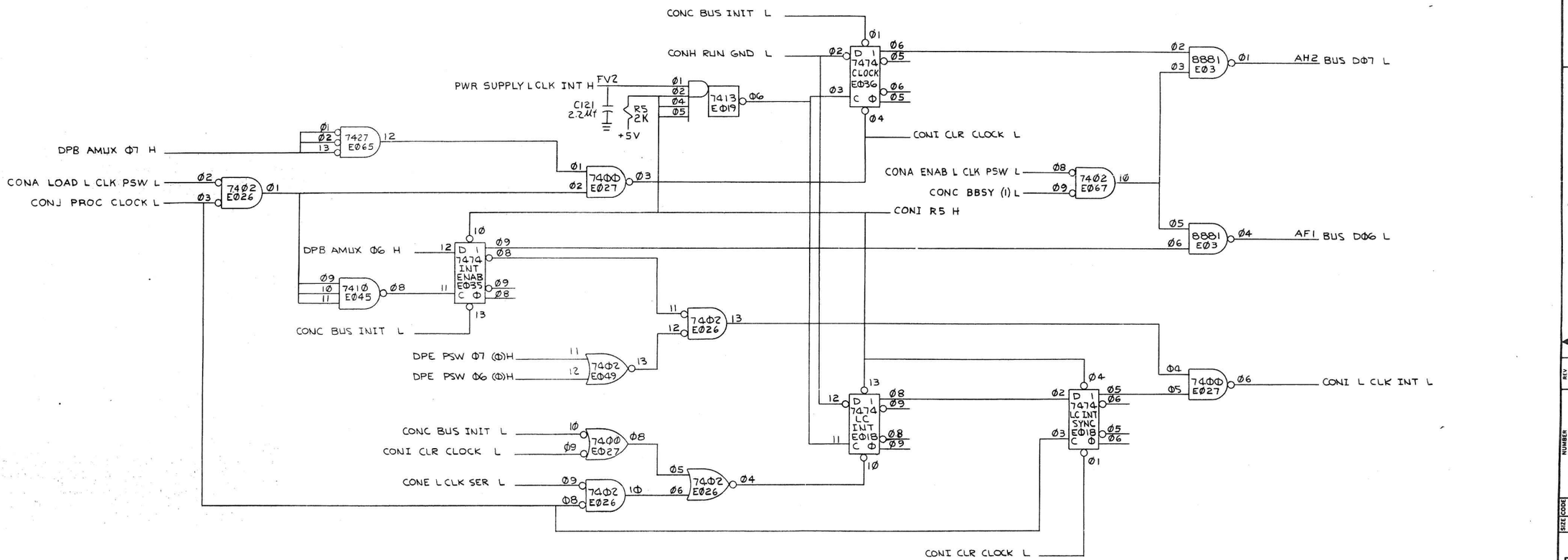
NEXT HIGHER ASSY. B-DD-KD11-B
SCALE —
SHEET 11 OF

SIZE	CODE	NUMBER	REV.
D	CS	M7261-Ø-1	K

DIST.

SIZE D CODE CS NUMBER M7261-Ø-1 REV K

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



LINE CLOCK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

FINISH —

DRN. W. MAJOR	DATE 3/2/72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D.	DATE 4/24/72	
ENG.	DATE 4/24/72	
PROJ. ENG.	DATE 4/24/72	
PROD. R.K. Peterson	DATE 4/27/72	

TITLE: CONTROL LOGIC & MICROPROGRAM (CONT)

NEXT HIGHER ASSY. B-DD-KDII-B

SCALE —

SHEET 12 OF

SIZE	CODE	NUMBER	REV.
D	CS	M7261-Ø-1	K

DIST.

REVISIONS

REV	CHANGE NO	CHK

DEC FORM NO ORD 102-B

79

s drawing and specifications, herein, are the prop: y of Digital Equipment Corporation and shall not be roduced or copied or used in whole or in part as basis for the manufacture or sale of items without tten permission.

CONJ S CLK ON L
CONJ MAN CLK L
CONC TOTAL SSYN L
CONC BUS ERROR H
CONC MSYN (1) H
CONC CKOFF (1) H
CONJ DIV (1) H
CONI R5 H
CONJ R24 H
CONJ EØ9Ø9 L
CONFF SHFT L
CONC CKOFF (1) L
CONJ DIV(1) H
CONJ BC CLOCK L
CONJ BC CLOCK H
CONJ ALLOW PC L
CONJ LNG PROC CLOCK L
CONJ LNG PROC CLOCK H
CONJ PROC CLOCK L
CONJ PROC CLOCK H
C.N.1
+5V
R1 1K
R2 47Ø
R3 2K
R6 5.6K
R10 1K
R24 2K
R26,330
C115 12Ø PF
FU2
FV1
DV1
EV1
8881 EØ13
7413 EØ19
74ØØ EØ27
74Ø2 EØ32
7410 EØ91
9ØØ2 EØØ9
7474 EØ44
7410 EØ45
74Ø5 EØ61
74H4Ø EØ54
74ØØ EØ64
74H4Ø EØ55

CPU CLOCK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1 | ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN. W.MAJOR	DATE 5/10/72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHKD.	DATE 4/21/72	
APP'D	DATE 4/24/72	
PROJ ENG.	DATE 4/26/72	
PROD. R.H. Peterson	DATE 4/27/72	

NEXT HIGHER ASSY. B-DD-KD11-B
SCALE
SHEET 13 OF

TITLE: CONTROL LOGIC & MICROPROGRAM (CONJ)
SIZE D | CODE CS | NUMBER M7261-Ø-1 | REV. K
DIST.

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	09	08	07	06	05	04	03	02	01	00
CONF MPC Ø7 L	CONF MPC Ø6 L	CONF MPC Ø5 L	CONF MPC Ø4 L	CONF MPC Ø3 L	CONF MPC Ø2 L	CONF MPC Ø1 L	CONF MPC ØØ L	CONF ALU S3 L	CONF ALU S2 L	CONF ALU S1 L	CONF ALU SØ L	CONF ALU MODE H	CONF CIN H	CONF F SHIFT L	CONF AUX CONTROL L	CONG LOAD PSW L	CONG ROM SPA Ø1 H	CONG ROM SPA Ø3 H	CONG ENAB IN PAUSE L	CONG SPA MUX ØØ H	CONG ROM SPA ØØ H	CONG SPA MUX Ø1 H	CONG BBOT H	CONG BA CLOCK L	CONG BTOP H	CONG SP WRITE L	CONG ROM SPA Ø2 H	CONG CKOFF L	CONG ALLOW BYTE L	CONG DATO L	CONG DATI L	CONG ROM ALEG 1 L	CONG ROM ALEG Ø L	CONG BMODE ØØ H	CONG BMODE Ø1 H	CONG BUT Ø1 L	CONG BUT ØØ L	CONG BUT Ø2 L	CONG BUT Ø3 L
NXT								ALU					CRI	FSH	AUX	PSW	SPI	SP3	DIP	SMØ	SPØ	SMI	BBT	BAR	BTP	SPF	SP2	CKO	ABT	TNS		ALG		BRG		BUT			
FØ92			FI03					FI04					FØ94			FØ96				FI06				FØ95				FI07				FØ93				FI05			

31 30 29 28 27 ALU	
AL	L L L L H
AA	L L L L L
AB	L L L H H
AB̄	L L H L H
Ø	L L H H H
A OR B	L H L L H
BL	L H H H H
A PLUS B	L H H L L
A XOR B	L H L L H
A-B-1	H L L H L
B̄	H L H H L
-1	H L H L H
A-1	H H L L H
Ā	H H L H L
ASL	H H H L L
ROL	H H H H L
ASR	H H H L H
ROR	H H H H L

26 CRI	
OFF	L
ON	H

23 PSW	
HOLD	H
LOAD	L

14 BTP	
BREG	H
SEX	L
+1	L

10 ABT	
NO	H
YES	L

Ø5 Ø4 BRG		
LOAD	H	H
SLEFT	L	H
SRIGHT	H	L
HOLD	L	L

Ø3 Ø2 Ø1 ØØ BUT			
NON	H	H	H	H
JMP/JSR	H	L	H	H
IR DECODE	L	H	H	H
BYTE	L	L	H	H
CONST	H	H	L	H
DEST	H	L	L	H
MOV	L	H	L	H
INTR	L	L	L	H
INIT	H	H	H	L
UNARY	H	L	H	L
SWITCHES	L	H	H	L
NON MOD	L	L	H	L
SERVICE	H	H	L	L
SSYNC	H	L	L	L
ENOVFLO	L	H	L	L
IR CLK	L	L	L	L

25 FSH	
OFF	H
ON	L

20 DIP	
OFF	H
ON	L

16 BBT	
BRG	H
SEX	H
+1	L

13 SPF	
READ	H
WRITE	L

Ø9 Ø8 TNS		
NONE	H	H
DATI	H	L
DATO	L	H

24 AUX	
OFF	H
ON	L

19 SMØ	17 SMI	
ROM	H	H
IRS	H	L
IRD	L	H
BA	L	L

15 BAR	
HOLD	H
LOAD	L

11 CKO	
OFF	H
ON	L

Ø7 Ø6 ALG		
SP	H	H
NULL	H	L
SPR	L	H
PSW	L	L

CONTROL STORE WORD FORMAT

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

FINISH —

DRN. D. Rudolph DATE 4-26-72
CHK'D [illegible] DATE 4/27/72
ENG. [illegible] DATE 4/24/72
PROJ. ENG. [illegible] DATE 4/24/72
PROD. [illegible] DATE 4/27/72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CONTROL LOGIC & MICROPROGRAM

NEXT HIGHER ASSY. B-DD-KDII-B

SCALE —

SHEET 14 OF

SIZE	CODE	NUMBER	REV.
D	CS	M7261-Ø-1	H

DIST

REVISIONS	REV	CHANGE NO	CHK

BRUNING 40-522 15840

DEC FORM NO DRD 102-B

PAGE REVISION CONTROL SHEET

SH NO	PAGE REVISIONS	REMARKS
1	A	
2	A	
3	A	
4	A	
5	A	
6	A	
7	A	
8	A	
9	A	
10	A	
11	A	
12	A	
13	A	
14	A	
15	A	
16	A	
17	A	
ETCH REV	C	
ECO NO.	5	

FIRST USED ON OPTION/MODEL

This document contains confidential proprietary information of DEC. This information shall not be disclosed to persons outside the employ of DEC, except by DEC personnel so authorized by DEC, and only for use by such other persons in the design, production or manufacture of products for DEC.
Copyright © 1972 Digital Equipment Corporation

DRN.		DATE
CHK'D	M T Bell	DATE 7/21/72
ENG.		DATE 8/17/72
PROJ. ENG.		DATE 8/17/72
PROD.	M T Bell	DATE 8/2/72
NEXT HIGHER ASSY.		
SCALE		
SHEET	1 OF 17	

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: CONTROL LOGIC ROM PATTERNS

SIZE	CODE	NUMBER	REV.
B	RL	M7261-0-8	A

DIST.

```
                        /( =Y8 (PIN #9) CONA INT TRAN SYNC L
                        */( =Y7 (PIN #7) CONA REG ADDR L
                        **/( =Y6 (PIN #6) CONA RECEIVE L
                        ***/( =Y5 (PIN #5) CONA TRANSMIT L
                        ****/( =Y4 (PIN #4) CONA LOAD MODEM PSW L
                        *****/( =Y3 (PIN #3) CONA LOAD L CLK PSW L
                        *******/( =Y2 (PIN #2) CONG SP WRITE L
                        ********/( =Y1 (PIN #1) CONG LOAD PSW L
  OCTAL  DECIMAL                ********          OCTAL
ADDRESS ADDRESS   EDCBA         ********          DATA
   000       0    00000        11111111          377
   001       1    00001        11111111          377
   002       2    00010        11111111          377
   003       3    00011        11111111          377
   004       4    00100        01111110          176       PSW ,TRAN OUT BA=177776
   005       5    00101        11111111          377       PSW ,TRAN OUT,BAR
   006       6    00110        01111011          173       LCLK ,TRANOUT
   007       7    00111        11111111          377       LCLK ,TRANOUT,BAR
   010       8    01000        00111101          075       GR<R0|R17> ,TRANOUT BA=1777XX
   011       9    01001        10111111          277       GR<R0|R17> ,TRANOUT,BAR
   012      10    01010        01111111          177       ODD BYTE (LCLK/TK/TP)
   013      11    01011        11111111          377
   014      12    01100        11111111          377
   015      13    01101        11111111          377
   016      14    01110        01111111          177       SWR ,TRANOUT BA=177570
   017      15    01111        11111111          377       SWR ,TRANOUT,BAR
   020      16    10000        01010111          127       TKS ,TRANOUT BA=177560
   021      17    10001        11011111          337       TKS ,TRANOUT,BAR
   022      18    10010        01100111          147       TPS ,TRANOUT BA=177564
   023      19    10011        11101111          357       TPS ,TRANOUT,BAR
   024      20    10100        01011111          137       TKB ,TRANOUT BA=177562
   025      21    10101        11011111          337       TKB ,TRANOUT,BAR
   026      22    10110        01101111          157       TPB ,TRANOUT BA=177566
   027      23    10111        11101111          357       TPB ,TRANOUT,BAR
   030      24    11000        11111111          377
   031      25    11001        11111111          377
   032      26    11010        11111111          377
   033      27    11011        11111111          377
   034      28    11100        11111111          377
   035      29    11101        11111111          377
   036      30    11110        11111111          377
   037      31    11111        11111111          377
                  *****
                  ****/( A(PIN #10) IS  CONA TRAN OUT L
                  ***/( B(PIN #11) IS  Y3 OF F025
                  **/( C(PIN #12) IS  Y2 OF F025
                  */( D(PIN #13) IS  Y1 OF F025
                  /( E(PIN #14) IS  Y4 OF F025
```



```
                        /( =Y8 (PIN #9) CONA ENAB L CLK PSW L
                        */( =Y7 (PIN #7) CONA INT TRAN SYNC L
                        **/( =Y6 (PIN #6) CONA ENAB ALU L
                        ***/( =Y5 (PIN #5) CONA ENAB MODEM PSW L
                        ****/( =Y4 (PIN #4) CONA ENAB SWITCH REG L
                        *****/( =Y3 (PIN #3) CONG ENAB SPL L
                        *******/( =Y2 (PIN #2) CONG ENAB SPR L
                        ********/( =Y1 (PIN #1) CONG ENAB PSW L
  OCTAL  DECIMAL                ********          OCTAL
ADDRESS ADDRESS   EDCBA         ********          DATA
   000       0    00000        11111111          377
   001       1    00001        11111111          377
   002       2    00010        11111111          377
   003       3    00011        11111111          377
   004       4    00100        10011110          236       PSW ,TRANIN BA=177776
   005       5    00101        11111111          377       PSW ,TRANIN,BAR
   006       6    00110        00111111          077       LCLK ,TRANIN BA=177546
   007       7    00111        11111111          377       LCLK ,TRANIN,BAR
   010       8    01000        10011001          231       GEN REG, ,TRANIN BA=1777XX
   011       9    01001        11111111          377       GEN REG ,TRANIN,BAR
   012      10    01010        10111111          277       ODD BYTE ADDRESS (LCLK/TK/TP)
   013      11    01011        11111111          377
   014      12    01100        11111111          377
   015      13    01101        11111111          377
   016      14    01110        10010111          227       SWR ,TRANIN BA=177570
   017      15    01111        11111111          377       SWR ,TRANIN,BAR
   020      16    10000        10001111          217       TKS ,TRANIN BA=177560
   021      17    10001        11111111          377       TKS ,TRANIN,BAR
   022      18    10010        10001111          217       TPS ,TRANIN BA=177564
   023      19    10011        11111111          377       TPS ,TRANIN,BAR
   024      20    10100        10011111          237       TKB ,TRANIN BA=177562
   025      21    10101        11111111          377       TKB ,TRANIN,BAR
   026      22    10110        10011111          237       TPB ,TRANIN BA=177566
   027      23    10111        11111111          377       TPB ,TRANIN,BAR
   030      24    11000        11111111          377
   031      25    11001        11111111          377
   032      26    11010        11111111          377
   033      27    11011        11111111          377
   034      28    11100        11111111          377
   035      29    11101        11111111          377
   036      30    11110        11111111          377
   037      31    11111        11111111          377
                  *****
                  ****/( A(PIN #10) IS  CONA TRAN IN L
                  ***/( B(PIN #11) IS  Y3 OF F025
                  **/( C(PIN #12) IS  Y2 OF F025
                  */( D(PIN #13) IS  Y1 OF F025
                  /( E(PIN #14) IS  Y4 OF F025
```

```
                        /( =Y8 (PIN #9)
                        */( =Y7 (PIN #7) CONF LINE CLOCK SER L
                        **/( =Y6 (PIN #6) CONF STACK FLOW L
                        ***/( =Y5 (PIN #5) CONF PWR FAIL SER L
                        ****/( =Y4 (PIN #4) CONF RCD SER L
                        *****/( =Y3 (PIN #3) CONF XMIT SER L
                        *******/( =Y2 (PIN #2)
                        *******/( =Y1 (PIN #1)
  OCTAL DECIMAL         ********          OCTAL
ADDRESS ADDRESS  EDCBA  ********          DATA
   000      0    00000  11111111          377
   001      1    00001  11111111          377
   002      2    00010  11111111          377
   003      3    00011  11111111          377
   004      4    00100  11111111          377
   005      5    00101  11111111          377
   006      6    00110  11111111          377
   007      7    00111  11111111          377
   010      8    01000  11111111          377
   011      9    01001  11111111          377
   012     10    01010  11110111          367     UART RCD INT MPC=64
   013     11    01011  11111111          377
   014     12    01100  11111111          377
   015     13    01101  11111111          377
   016     14    01110  11111011          373     UART XMIT INT MPC=60
   017     15    01111  11111111          377
   020     16    10000  11111111          377
   021     17    10001  11111111          377
   022     18    10010  11011111          337     ERT=1A STACK FLOW MPC=46
   023     19    10011  11111111          377
   024     20    10100  11101111          357     PWR FAIL MPC=43
   025     21    10101  11111111          377
   026     22    10110  10111111          277     LINE CLK INT MPC=42
   027     23    10111  11111111          377
   030     24    11000  11111111          377
   031     25    11001  11111111          377
   032     26    11010  11111111          377
   033     27    11011  11111111          377
   034     28    11100  11111111          377
   035     29    11101  11111111          377
   036     30    11110  11111111          377
   037     31    11111  11111111          377
                        *****
                        ****/( A(PIN #10) IS  CONN RUN GND L
                        ***/( B(PIN #11) IS  CONF MPC 00 L
                        **/( C(PIN #12) IS  CONF MPC 02 L
                        */( D(PIN #13) IS  CONF MPC 01 L
                        /( E(PIN #14) IS  CONF MPC 04 L
```



```
                        /( =Y8 (PIN #9) CONF MPC 05 L
                        */( =Y7 (PIN #7) CONF EXAM SW L
                        **/( =Y6 (PIN #6) CONF DEP SW L
                        ***/( =Y5 (PIN #5) CONF MPC 00 L
                        ****/( =Y4 (PIN #4) CONF MPC 04 L
                        *****/( =Y3 (PIN #3) CONF MPC 01 L
                        *******/( =Y2 (PIN #2) CONF MPC 02 L
                        *******/( =Y1 (PIN #1) CONF MPC 03 L
  OCTAL DECIMAL         ********          OCTAL
ADDRESS ADDRESS  EDCBA  ********          DATA
   000      0    00000  11111000          370     CONTINUE
   001      1    00001  11111011          373     TWO SW =CONT,DEP
   002      2    00010  11111011          373     TWO SW EXAM,CONT
   003      3    00011  11111011          373     TWO SW LOAD,CONT
   004      4    00100  11111011          373     NO SW
   005      5    00101  11001010          312     DEP SW1 GOTO 313
   006      6    00110  10101000          250     EXAM GOTO TO 317
   007      7    00111  11101110          356     LOAD  GOTO TO 311
   010      8    01000  11111000          370     CONT=CLR EXAM
   011      9    01001  11111011          373     TWO SW =CONT,DEP
   012     10    01010  11101011          353     TWO SW EXAM,CONT
   013     11    01011  11101011          353     TWO SW LOAD,CONT
   014     12    01100  10111011          273     NO SW 1ST EXAM
   015     13    01101  11001010          312     DEP SW1
   016     14    01110  10101100          254     EXAM AND 1ST EXAM 323
   017     15    01111  11101110          356     LOAD GOTO 311
   020     16    10000  11111000          370     CONT=CLR DEP
   021     17    10001  11111011          373     TWO SW =CONT,DEP
   022     18    10010  11111011          373     TWO SW EXAM,CONT
   023     19    10011  11011011          333     TWO SW LOAD,CONT
   024     20    10100  11011011          333     NO SW 1ST DEP
   025     21    10101  11011010          332     DEP SW2 GOTO 312
   026     22    10110  10101000          250     EXAM,1ST DEP 317
   027     23    10111  11101110          356     LOAD GOTO 311
   030     24    11000  00000100          004
   031     25    11001  00000000          000
   032     26    11010  00000000          000
   033     27    11011  00000000          000
   034     28    11100  00000000          000
   035     29    11101  00000000          000
   036     30    11110  00000000          000
   037     31    11111  00000000          000
                        *****
                        ****/( A(PIN #10) IS  CONE LOAD (1)L ,AND, DEP (1)L ;BAR
                        ***/( B(PIN #11) IS  CONE LOAD (1)L ;AND, EXAM (1)L ;BAR
                        **/( C(PIN #12) IS  CONE CONT (1)L
                        */( D(PIN #13) IS  CONE 1ST EXAM (1)H
                        /( E(PIN #14) IS  CONE 1ST DEP (1)H
```

```
                                        /( =Y4 (PIN # 9) CONC SET BG 07 L
                                        */( =Y3 (PIN #10) CONC SET BG 06 L
                                        **/( =Y2 (PIN #11) CONC SET BG 05 L
                                        ***/( =Y1 (PIN #12) CONC SET BG 04 L
  OCTAL DECIMAL                         ****          OCTAL
ADDRESS ADDRESS   HGFEDCBA              ****          DATA
    000       0   00000000              1111          017
    001       1   00000001              1111          017
    002       2   00000010              1111          017
    003       3   00000011              1111          017
    004       4   00000100              1111          017
    005       5   00000101              1111          017
    006       6   00000110              1111          017
    007       7   00000111              1111          017
    010       8   00001000              1111          017
    011       9   00001001              1111          017
    012      10   00001010              1111          017
    013      11   00001011              1111          017
    014      12   00001100              1111          017
    015      13   00001101              1111          017
    016      14   00001110              1111          017
    017      15   00001111              1111          017
    020      16   00010000              1111          017
    021      17   00010001              1111          017
    022      18   00010010              1111          017
    023      19   00010011              1111          017
    024      20   00010100              1111          017
    025      21   00010101              1111          017
    026      22   00010110              1111          017
    027      23   00010111              1111          017
    030      24   00011000              1111          017
    031      25   00011001              1111          017
    032      26   00011010              1111          017
    033      27   00011011              1111          017
    034      28   00011100              1111          017
    035      29   00011101              1111          017
    036      30   00011110              1111          017
    037      31   00011111              1111          017
```

M7261-8 REV A

```
    040      32   00100000              0111          007
    041      33   00100001              1011          013
    042      34   00100010              0111          007
    043      35   00100011              1111          017       LCLK
    044      36   00100100              0111          007
    045      37   00100101              1011          013
    046      38   00100110              0111          007
    047      39   00100111              1101          015
    050      40   00101000              0111          007
    051      41   00101001              1011          013
    052      42   00101010              0111          007
    053      43   00101011              1111          017
    054      44   00101100              0111          007
    055      45   00101101              1011          013
    056      46   00101110              0111          007
    057      47   00101111              1110          016
    060      48   00110000              0111          007
    061      49   00110001              1011          013
    062      50   00110010              0111          007
    063      51   00110011              1111          017       LCLK
    064      52   00110100              0111          007
    065      53   00110101              1011          013
    066      54   00110110              0111          007
    067      55   00110111              1101          015
    070      56   00111000              0111          007
    071      57   00111001              1011          013
    072      58   00111010              0111          007
    073      59   00111011              1111          017
    074      60   00111100              0111          007
    075      61   00111101              1011          013
    076      62   00111110              0111          007
    077      63   00111111              1111          017
                  ********
                  *******/( A(PIN #05) IS  CONC BR 07 (1)L
                  ******/( B(PIN #06) IS  CONC BR 06 (1)L
                  *****/( C(PIN #07) IS  CONI LCLK INT L
                  ****/( D(PIN #04) IS  CONC BR 05 (1)L
                  ***/( E(PIN #03) IS  CONC BR 04 (1)L
                  **/( F(PIN #02) IS  DPE PSW 07 (0)H
                  */( G(PIN #01) IS  DPE PSW 06 (0)H
                  /( H(PIN #15) IS  DPE PSW 05 (0)H
```

```
                                /( =Y4 (PIN # 9) CONC SET BG 07 L
                                */( =Y3 (PIN #10) CONC SET BG 06 L
                                **/( =Y2 (PIN #11) CONC SET BG 05 L
                                ***/( =Y1 (PIN #12) CONC SET BG 04 L
  OCTAL DECIMAL                 ****          OCTAL
ADDRESS ADDRESS   HGFEDCBA      ****          DATA
    100      64   01000000      0111          007
    101      65   01000001      1011          013
    102      66   01000010      0111          007
    103      67   01000011      1111          017
    104      68   01000100      0111          007
    105      69   01000101      1011          013
    106      70   01000110      0111          007
    107      71   01000111      1111          017
    110      72   01001000      0111          007
    111      73   01001001      1011          013
    112      74   01001010      0111          007
    113      75   01001011      1111          017
    114      76   01001100      0111          007
    115      77   01001101      1011          013
    116      78   01001110      0111          007
    117      79   01001111      1111          017
    120      80   01010000      0111          007
    121      81   01010001      1011          013
    122      82   01010010      0111          007
    123      83   01010011      1111          017
    124      84   01010100      0111          007
    125      85   01010101      1011          013
    126      86   01010110      0111          007
    127      87   01010111      1111          017
    130      88   01011000      0111          007
    131      89   01011001      1011          013
    132      90   01011010      0111          007
    133      91   01011011      1111          017
    134      92   01011100      0111          007
    135      93   01011101      1011          013
    136      94   01011110      0111          007
    137      95   01011111      1111          017
```

M7261-8 REV A

```
    140      96   01100000      0111          007
    141      97   01100001      1011          013
    142      98   01100010      0111          007
    143      99   01100011      1111          017       LCLK
    144     100   01100100      0111          007
    145     101   01100101      1011          013
    146     102   01100110      0111          007
    147     103   01100111      1101          015
    150     104   01101000      0111          007
    151     105   01101001      1111          017
    152     106   01101010      0111          007
    153     107   01101011      1111          017       LCLK
    154     108   01101100      0111          007
    155     109   01101101      1011          013
    156     110   01101110      0111          007
    157     111   01101111      1110          016
    160     112   01110000      0111          007
    161     113   01110001      1011          013
    162     114   01110010      0111          007
    163     115   01110011      1111          017       LCLK
    164     116   01110100      0111          007
    165     117   01110101      1011          013
    166     118   01110110      0111          007
    167     119   01110111      1101          015
    170     120   01111000      0111          007
    171     121   01111001      1011          013
    172     122   01111010      0111          007
    173     123   01111011      1111          017
    174     124   01111100      0111          007
    175     125   01111101      1011          013
    176     126   01111110      0111          007
    177     127   01111111      1111          017
                  ********
                  *******/( A(PIN #05) IS  CONC BR 07 (1)L
                  ******/( B(PIN #06) IS  CONC BR 06 (1)L
                  *****/( C(PIN #07) IS  CONI LCLK INT L
                  ****/( D(PIN #04) IS  CONC BR 05 (1)L
                  ***/( E(PIN #03) IS  CONC BR 04 (1)L
                  **/( F(PIN #02) IS  DPE PSW 07 (0)H
                  */( G(PIN #01) IS  DPE PSW 06 (0)H
                  /( H(PIN #15) IS  DPE PSW 05 (0)H
```

```
                                    /( =Y4 (PIN # 9) CONC SET BG 07 L
                                    */( =Y3 (PIN #10) CONC SET BG 06 L
                                    **/( =Y2 (PIN #11) CONC SET BG 05 L
                                    ***/( =Y1 (PIN #12) CONC SET BG 04 L
  OCTAL  DECIMAL                    ****          OCTAL
ADDRESS ADDRESS    HGFEDCBA         ****          DATA
    200     128    10000000         0111          007
    201     129    10000001         1111          017
    202     130    10000010         0111          007
    203     131    10000011         1111          017
    204     132    10000100         0111          007
    205     133    10000101         1111          017
    206     134    10000110         0111          007
    207     135    10000111         1111          017
    210     136    10001000         0111          007
    211     137    10001001         1111          017
    212     138    10001010         0111          007
    213     139    10001011         1111          017
    214     140    10001100         0111          007
    215     141    10001101         1111          017
    216     142    10001110         0111          007
    217     143    10001111         1111          017
    220     144    10010000         0111          007
    221     145    10010001         1111          017
    222     146    10010010         0111          007
    223     147    10010011         1111          017
    224     148    10010100         0111          007
    225     149    10010101         1111          017
    226     150    10010110         0111          007
    227     151    10010111         1111          017
    230     152    10011000         0111          007
    231     153    10011001         1111          017
    232     154    10011010         0111          007
    233     155    10011011         1111          017
    234     156    10011100         0111          007
    235     157    10011101         1111          017
    236     158    10011110         0111          007
    237     159    10011111         1111          017
```

M7261-8 Rev A

```
    240     160    10100000         0111          007
    241     161    10100001         1011          013
    242     162    10100010         0111          007
    243     163    10100011         1111          017        LCLK
    244     164    10100100         0111          007
    245     165    10100101         1011          013
    246     166    10100110         0111          007
    247     167    10100111         1101          015
    250     168    10101000         0111          007
    251     169    10101001         1011          013
    252     170    10101010         0111          007
    253     171    10101011         1111          017        LCLK
    254     172    10101100         0111          007
    255     173    10101101         1011          013
    256     174    10101110         0111          007
    257     175    10101111         1110          016
    260     176    10110000         0111          007
    261     177    10110001         1011          013
    262     178    10110010         0111          007
    263     179    10110011         1111          017        LCLK
    264     180    10110100         0111          007
    265     181    10110101         1011          013
    266     182    10110110         0111          007
    267     183    10110111         1101          015
    270     184    10111000         0111          007
    271     185    10111001         1011          013
    272     186    10111010         0111          007
    273     187    10111011         1111          017
    274     188    10111100         0111          007
    275     189    10111101         1011          013
    276     190    10111110         0111          007
    277     191    10111111         1111          017
                   ********
                   ********/( A(PIN #05) IS  CONC BR 07 (1)L
                   *******/( B(PIN #06) IS  CONC BR 06 (1)L
                   ******/( C(PIN #07) IS  CONI LCLK INT L
                   *****/( D(PIN #04) IS  CONC BR 05 (1)L
                   ****/( E(PIN #03) IS  CONC BR 04 (1)L
                   ***/( F(PIN #02) IS  DPE PSW 07 (0)H
                   **/( G(PIN #01) IS  DPE PSW 06 (0)H
                   */( H(PIN #15) IS  DPE PSW 05 (0)H
```

```
                                /( =Y4 (PIN # 9) CONC SET BG Ø7 L
                                */( =Y3 (PIN #10) CONC SET BG Ø6 L
                                **/( =Y2 (PIN #11) CONC SET BG Ø5 L
                                ***/( =Y1 (PIN #12) CONC SET BG Ø4 L
  OCTAL DECIMAL                 ****          OCTAL
ADDRESS ADDRESS   HGFEDCBA      ****          DATA
    300     192   11000000      0111          007
    301     193   11000001      1011          013
    302     194   11000010      0111          007
    303     195   11000011      1111          017       LCLK
    304     196   11000100      0111          007
    305     197   11000101      1011          013
    306     198   11000110      0111          007
    307     199   11000111      1101          015
    310     200   11001000      0111          007
    311     201   11001001      1011          013
    312     202   11001010      0111          007
    313     203   11001011      1111          017       LCLK
    314     204   11001100      0111          007
    315     205   11001101      1011          013
    316     206   11001110      0111          007
    317     207   11001111      1111          017
    320     208   11010000      0111          007
    321     209   11010001      1011          013
    322     210   11010010      0111          007
    323     211   11010011      1111          017       LCLK
    324     212   11010100      0111          007
    325     213   11010101      1011          013
    326     214   11010110      0111          007
    327     215   11010111      1101          015
    330     216   11011000      0111          007
    331     217   11011001      1011          013
    332     218   11011010      0111          007
    333     219   11011011      1111          017
    334     220   11011100      0111          007
    335     221   11011101      1011          013
    336     222   11011110      0111          007
    337     223   11011111      1111          017
```

M7261-8 Rev A

```
    340     224   11100000      0111          007
    341     225   11100001      1011          013
    342     226   11100010      0111          007
    343     227   11100011      1111          017       LCLK
    344     228   11100100      0111          007
    345     229   11100101      1011          013
    346     230   11100110      0111          007
    347     231   11100111      1101          015
    350     232   11101000      0111          007
    351     233   11101001      1011          013
    352     234   11101010      0111          007
    353     235   11101011      1111          017       LCLK
    354     236   11101100      0111          007
    355     237   11101101      1011          013
    356     238   11101110      0111          007
    357     239   11101111      1110          016
    360     240   11110000      0111          007
    361     241   11110001      1011          013
    362     242   11110010      0111          007
    363     243   11110011      1111          017       LCLK
    364     244   11110100      0111          007
    365     245   11110101      1011          013
    366     246   11110110      0111          007
    367     247   11110111      1101          015
    370     248   11111000      0111          007
    371     249   11111001      1011          013
    372     250   11111010      0111          007
    373     251   11111011      1111          017
    374     252   11111100      0111          007
    375     253   11111101      1011          013
    376     254   11111110      0111          007
    377     255   11111111      1111          017
                  ********
                  ********/( A(PIN #05) IS  CONC BR Ø7 (1)L
                  *******/( B(PIN #06) IS  CONC BR Ø6 (1)L
                  ******/( C(PIN #07) IS  CONI LCLK INT L
                  *****/( D(PIN #04) IS  CONC BR Ø5 (1)L
                  ****/( E(PIN #03) IS  CONC BR Ø4 (1)L
                  ***/( F(PIN #02) IS  DPE PSW Ø7 (Ø)H
                  **/( G(PIN #01) IS  DPE PSW Ø6 (Ø)H
                  */( H(PIN #15) IS  DPE PSW Ø5 (Ø)H
```

```
                                  /( =Y4 (PIN # 9) Y4
                                  +/( =Y3 (PIN #10) Y3
                                  ++/( =Y2 (PIN #11) Y2
                                  +++/( =Y1 (PIN #12) Y1
  OCTAL DECIMAL                   ++++          OCTAL
ADDRESS ADDRESS    HGFEDCBA       ++++          DATA
    000       0    00000000       0000          000
    001       1    00000001       0000          000
    002       2    00000010       0000          000
    003       3    00000011       0000          000
    004       4    00000100       0000          000
    005       5    00000101       0000          000
    006       6    00000110       0000          000
    007       7    00000111       0000          000
    010       8    00001000       0000          000
    011       9    00001001       0000          000
    012      10    00001010       0000          000
    013      11    00001011       0000          000
    014      12    00001100       0000          000
    015      13    00001101       0000          000
    016      14    00001110       0000          000
    017      15    00001111       0000          000
    020      16    00010000       0000          000
    021      17    00010001       0000          000
    022      18    00010010       0000          000
    023      19    00010011       0000          000
    024      20    00010100       0000          000
    025      21    00010101       0000          000
    026      22    00010110       0000          000
    027      23    00010111       0000          000
    030      24    00011000       0000          000
    031      25    00011001       0000          000
    032      26    00011010       0000          000
    033      27    00011011       0000          000
    034      28    00011100       0000          000
    035      29    00011101       0000          000
    036      30    00011110       0000          000
    037      31    00011111       0000          000
```

M7261-8 REV A

```
    040      32    00100000       0000          000
    041      33    00100001       0000          000
    042      34    00100010       0000          000
    043      35    00100011       0000          000
    044      36    00100100       0000          000
    045      37    00100101       0000          000
    046      38    00100110       0000          000
    047      39    00100111       0000          000
    050      40    00101000       0000          000
    051      41    00101001       0000          000
    052      42    00101010       0000          000
    053      43    00101011       0000          000
    054      44    00101100       0000          000
    055      45    00101101       0000          000
    056      46    00101110       0000          000
    057      47    00101111       0000          000
    060      48    00110000       0000          000
    061      49    00110001       0000          000
    062      50    00110010       0000          000
    063      51    00110011       0000          000
    064      52    00110100       0000          000
    065      53    00110101       0000          000
    066      54    00110110       0000          000
    067      55    00110111       0000          000
    070      56    00111000       0000          000
    071      57    00111001       0000          000
    072      58    00111010       0000          000
    073      59    00111011       0000          000
    074      60    00111100       0000          000
    075      61    00111101       0000          000
    076      62    00111110       0000          000
    077      63    00111111       0000          000
                   ++++++++
                   +++++++/( A(PIN #05) IS  CONA BA 02 (1)H
                   ++++++/( B(PIN #06) IS  CONA BA 01 (1)H
                   +++++/( C(PIN #07) IS  CONA BA 00 (1)H
                   ++++/( D(PIN #04) IS  CONA BA 03 (1)H
                   +++/( E(PIN #03) IS  CONA BA 04 (1)H
                   ++/( F(PIN #02) IS  CONA BA 05 (1)H
                   +/( G(PIN #01) IS  CONA BA 07 (1)H
                   /( H(PIN #15) IS  CONA BA 06 (1)H
```

```
                                    /( =Y4 (PIN # 9) Y4
                                    */( =Y3 (PIN #10) Y3
                                    **/( =Y2 (PIN #11) Y2
                                    ***/( =Y1 (PIN #12) Y1
 OCTAL  DECIMAL                     ****        OCTAL
ADDRESS ADDRESS   HGFEDCBA          ****        DATA
    100      64   01000000          0000        000
    101      65   01000001          0000        000
    102      66   01000010          0000        000
    103      67   01000011          0000        000
    104      68   01000100          0000        000
    105      69   01000101          0000        000
    106      70   01000110          0000        000
    107      71   01000111          0000        000
    110      72   01001000          0000        000
    111      73   01001001          0000        000
    112      74   01001010          0000        000
    113      75   01001011          0000        000
    114      76   01001100          0000        000
    115      77   01001101          0000        000
    116      78   01001110          0000        000
    117      79   01001111          0000        000
    120      80   01010000          0000        000
    121      81   01010001          0000        000
    122      82   01010010          0000        000
    123      83   01010011          0000        000
    124      84   01010100          0000        000
    125      85   01010101          0000        000
    126      86   01010110          0000        000
    127      87   01010111          0000        000
    130      88   01011000          0000        000
    131      89   01011001          0000        000
    132      90   01011010          0000        000
    133      91   01011011          0000        000
    134      92   01011100          0000        000
    135      93   01011101          0000        000
    136      94   01011110          0000        000
    137      95   01011111          0000        000
```

11

M7261-8 REV A

```
    140      96   01100000          0000        000
    141      97   01100001          0000        000
    142      98   01100010          0000        000
    143      99   01100011          0000        000
    144     100   01100100          0000        000
    145     101   01100101          0000        000
    146     102   01100110          0000        000
    147     103   01100111          0000        000
    150     104   01101000          0000        000
    151     105   01101001          0000        000
    152     106   01101010          0000        000
    153     107   01101011          0000        000
    154     108   01101100          0000        000
    155     109   01101101          0000        000
    156     110   01101110          0000        000
    157     111   01101111          0000        000
    160     112   01110000          0000        000
    161     113   01110001          0000        000
    162     114   01110010          0000        000
    163     115   01110011          0000        000
    164     116   01110100          0000        000
    165     117   01110101          0000        000
    166     118   01110110          0000        000
    167     119   01110111          0000        000
    170     120   01111000          0000        000
    171     121   01111001          0000        000
    172     122   01111010          0000        000
    173     123   01111011          0000        000
    174     124   01111100          0000        000
    175     125   01111101          0000        000
    176     126   01111110          0000        000
    177     127   01111111          0000        000
                  ********
                  *******/( A(PIN #05) IS  CONA BA 02 (1)H
                  ******/( B(PIN #06) IS  CONA BA 01 (1)H
                  *****/( C(PIN #07) IS  CONA BA 00 (1)H
                  ****/( D(PIN #04) IS  CONA BA 03 (1)H
                  ***/( E(PIN #03) IS  CONA BA 04 (1)H
                  **/( F(PIN #02) IS  CONA BA 05 (1)H
                  */( G(PIN #01) IS  CONA BA 07 (1)H
                  /( H(PIN #15) IS  CONA BA 06 (1)H
```

11 Cont

```
                                /( =Y4 (PIN # 9) Y4
                                +/( =Y3 (PIN #10) Y3
                                ++/( =Y2 (PIN #11) Y2
                                +++/( =Y1 (PIN #12) Y1
                                ++++            OCTAL
 OCTAL DECIMAL                  ++++            DATA
ADDRESS ADDRESS   HGFEDCBA      ++++
   200     128   10000000       0000            000
   201     129   10000001       0000            000
   202     130   10000010       0000            000
   203     131   10000011       0000            000
   204     132   10000100       0000            000
   205     133   10000101       0000            000
   206     134   10000110       0000            000
   207     135   10000111       0000            000
   210     136   10001000       0000            000
   211     137   10001001       0000            000
   212     138   10001010       0000            000
   213     139   10001011       0000            000
   214     140   10001100       0000            000
   215     141   10001101       0000            000
   216     142   10001110       0000            000
   217     143   10001111       0000            000
   220     144   10010000       0000            000
   221     145   10010001       0000            000
   222     146   10010010       0000            000
   223     147   10010011       0000            000
   224     148   10010100       0000            000
   225     149   10010101       0000            000
   226     150   10010110       0000            000
   227     151   10010111       0000            000
   230     152   10011000       0000            000
   231     153   10011001       0000            000
   232     154   10011010       0000            000
   233     155   10011011       0000            000
   234     156   10011100       0000            000
   235     157   10011101       0000            000
   236     158   10011110       0000            000
   237     159   10011111       0000            000
```

M7261-8 REV A

```
   240     160   10100000       0000            000
   241     161   10100001       0000            000
   242     162   10100010       0000            000
   243     163   10100011       0110            006        KW11-L LINE CLK CSR
   244     164   10100100       0000            000
   245     165   10100101       0000            000
   246     166   10100110       0000            000
   247     167   10100111       0101            005        KW11-L (ODD BYTE)
   250     168   10101000       0000            000
   251     169   10101001       0000            000
   252     170   10101010       0000            000
   253     171   10101011       0000            000
   254     172   10101100       0000            000
   255     173   10101101       0000            000
   256     174   10101110       0000            000
   257     175   10101111       0000            000
   260     176   10110000       1000            010        TKS TTY KEYBOARD CSR
   261     177   10110001       1100            014        TPS PRINTER CSR
   262     178   10110010       1010            012        TKB TTY KEYBOARD  DBR
   263     179   10110011       1110            016        TPB TTY PRINTER DBR
   264     180   10110100       0101            005        TKS (ODD BYTE)
   265     181   10110101       0101            005        TPS (ODD BYTE)
   266     182   10110110       0101            005        TKB (ODD BYTE)
   267     183   10110111       0101            005        TPB (ODD BYTE)
   270     184   10111000       0111            007        SWITCH REGISTER
   271     185   10111001       0000            000
   272     186   10111010       0000            000
   273     187   10111011       0000            000
   274     188   10111100       0111            007        CONSOLE SW REG, (ODD BYTE)
   275     189   10111101       0000            000
   276     190   10111110       0000            000
   277     191   10111111       0000            000
                 ++++++++
                 +++++++/( A(PIN #05) IS  CONA BA 02 (1)H
                 ++++++/( B(PIN #06) IS  CONA BA 01 (1)H
                 +++++/( C(PIN #07) IS  CONA BA 00 (1)H
                 ++++/( D(PIN #04) IS  CONA BA 03 (1)H
                 +++/( E(PIN #03) IS  CONA BA 04 (1)H
                 ++/( F(PIN #02) IS  CONA BA 05 (1)H
                 +/( G(PIN #01) IS  CONA BA 07 (1)H
                 /( H(PIN #15) IS  CONA BA 06 (1)H
```

```
                                    /( =Y4 (PIN # 9) Y4
                                    */( =Y3 (PIN #10) Y3
                                    **/( =Y2 (PIN #11) Y2
                                    ***/( =Y1 (PIN #12) Y1
  OCTAL DECIMAL                     ****      OCTAL
ADDRESS ADDRESS   HGFEDCBA          ****      DATA
    300     192   11000000          0001      001       REG R0
    301     193   11000001          0001      001       REG R4
    302     194   11000010          0001      001       REG R2
    303     195   11000011          0001      001       REG R6
    304     196   11000100          0001      001       REG R1
    305     197   11000101          0001      001       REG R5
    306     198   11000110          0001      001       REG R3
    307     199   11000111          0001      001       REG R7
    310     200   11001000          0001      001       REG R10
    311     201   11001001          0001      001       REG R14
    312     202   11001010          0001      001       REG R12
    313     203   11001011          0001      001       REG R16
    314     204   11001100          0001      001       REG R11
    315     205   11001101          0001      001       REG R15
    316     206   11001110          0001      001       REG R13
    317     207   11001111          0001      001       REG R17
    320     208   11010000          0000      000
    321     209   11010001          0000      000
    322     210   11010010          0000      000
    323     211   11010011          0000      000
    324     212   11010100          0000      000
    325     213   11010101          0000      000
    326     214   11010110          0000      000
    327     215   11010111          0000      000
    330     216   11011000          0000      000
    331     217   11011001          0000      000
    332     218   11011010          0000      000
    333     219   11011011          0000      000
    334     220   11011100          0000      000
    335     221   11011101          0000      000
    336     222   11011110          0000      000
    337     223   11011111          0000      000
```

M7261-8 REV A

```
    340     224   11100000          0000      000
    341     225   11100001          0000      000
    342     226   11100010          0000      000
    343     227   11100011          0000      000
    344     228   11100100          0000      000
    345     229   11100101          0000      000
    346     230   11100110          0000      000
    347     231   11100111          0000      000
    350     232   11101000          0000      000
    351     233   11101001          0000      000
    352     234   11101010          0000      000
    353     235   11101011          0000      000
    354     236   11101100          0000      000
    355     237   11101101          0000      000
    356     238   11101110          0000      000
    357     239   11101111          0000      000
    360     240   11110000          0000      000
    361     241   11110001          0000      000
    362     242   11110010          0000      000
    363     243   11110011          0000      000
    364     244   11110100          0000      000
    365     245   11110101          0000      000
    366     246   11110110          0000      000
    367     247   11110111          0000      000
    370     248   11111000          0000      000
    371     249   11111001          0000      000
    372     250   11111010          0000      000
    373     251   11111011          0010      002       PSW
    374     252   11111100          0000      000
    375     253   11111101          0000      000
    376     254   11111110          0000      000
    377     255   11111111          0010      002       PSW (ODD BYTE)
                  ********
                  *******/( A(PIN #05) IS  CONA BA 02 (1)H
                  ******/( B(PIN #06) IS  CONA BA 01 (1)H
                  *****/( C(PIN #07) IS  CONA BA 00 (1)H
                  ****/( D(PIN #04) IS  CONA BA 03 (1)H
                  ***/( E(PIN #03) IS  CONA BA 04 (1)H
                  **/( F(PIN #02) IS  CONA BA 05 (1)H
                  */( G(PIN #01) IS  CONA BA 07 (1)H
                  /( H(PIN #15) IS  CONA BA 06 (1)H
```

```
                                /( =Y4 (PIN # 9) CONF MPC 04 L
                                */( =Y3 (PIN #10) CONF MPC 01 L
                                **/( =Y2 (PIN #11) CONF MPC 02 L
                                ***/( =Y1 (PIN #12) CONF MPC 00 L
  OCTAL  DECIMAL                ****          OCTAL
ADDRESS ADDRESS   HGFEDCBA      ****          DATA
    000       0   00000000      1100          014      T
    001       1   00000001      1100          014      T
    002       2   00000010      1100          014      T
    003       3   00000011      1100          014      T
    004       4   00000100      1100          014      T
    005       5   00000101      1100          014      T
    006       6   00000110      1100          014      T
    007       7   00000111      1100          014      T
    010       8   00001000      1100          014      T
    011       9   00001001      1100          014      T
    012      10   00001010      1100          014      T
    013      11   00001011      1100          014      T
    014      12   00001100      1100          014      T
    015      13   00001101      1100          014      T
    016      14   00001110      1100          014      T
    017      15   00001111      1100          014      T
    020      16   00010000      1100          014      T
    021      17   00010001      1100          014      T
    022      18   00010010      1100          014      "
    023      19   00010011      1100          014
    024      20   00010100      1100          014
    025      21   00010101      1100          014      T
    026      22   00010110      1100          014      T
    027      23   00010111      1100          014      T
    030      24   00011000      1100          014      T
    031      25   00011001      1100          014      T
    032      26   00011010      1100          014      T
    033      27   00011011      1100          014      T
    034      28   00011100      1100          014      T
    035      29   00011101      1100          014      T
    036      30   00011110      1100          014      T
    037      31   00011111      1100          014      T
```

M7261-8 REV A

```
    040      32   00100000      1100          014      T
    041      33   00100001      1100          014      T
    042      34   00100010      1100          014      T
    043      35   00100011      1100          014      T
    044      36   00100100      1100          014      T
    045      37   00100101      1100          014      T
    046      38   00100110      1100          014      T
    047      39   00100111      1100          014      T
    050      40   00101000      1100          014      T
    051      41   00101001      1100          014      T
    052      42   00101010      1100          014      T
    053      43   00101011      1100          014      T
    054      44   00101100      1100          014      T
    055      45   00101101      1100          014      T
    056      46   00101110      1100          014      T
    057      47   00101111      1100          014      T
    060      48   00110000      1100          014      T
    061      49   00110001      1100          014      T
    062      50   00110010      1100          014      T
    063      51   00110011      1100          014      T
    064      52   00110100      1100          014      T
    065      53   00110101      1100          014      T
    066      54   00110110      1100          014      T
    067      55   00110111      1100          014      T
    070      56   00111000      1100          014      T
    071      57   00111001      1100          014      T
    072      58   00111010      1100          014      T
    073      59   00111011      1100          014      T
    074      60   00111100      1100          014      T
    075      61   00111101      1100          014      T
    076      62   00111110      1100          014      T
    077      63   00111111      1100          014      T
                  ********
                  ********/( A(PIN #05) IS  CONB STACKFLOW (1)L
                  *******/( B(PIN #06) IS  CONH PDWN SYNC (1)L
                  ******/( C(PIN #07) IS  CONI LCLK INT (1)L
                  *****/( D(PIN #04) IS  CONE STOP (1)L
                  ****/( E(PIN #03) IS  DPH RCD INT (1)L
                  ***/( F(PIN #02) IS  DPH XMIT INT (1)L
                  **/( G(PIN #01) IS  DPG WAIT L
                  */( H(PIN #15) IS  DPE T DEL (1)L
```

14

1K Cont

```
                                /( =Y4 (PIN # 9) CONF MPC 04 L
                                */( =Y3 (PIN #10) CONF MPC 01 L
                                **/( =Y2 (PIN #11) CONF MPC 02 L
                                ***/( =Y1 (PIN #12) CONF MPC 00 L
  OCTAL DECIMAL                 ****          OCTAL
ADDRESS ADDRESS   HGFEDCBA      ****          DATA
    100      64   01000000      1100          014       T
    101      65   01000001      1100          014       T
    102      66   01000010      1100          014       T
    103      67   01000011      1100          014       T
    104      68   01000100      1100          014       T
    105      69   01000101      1100          014       T
    106      70   01000110      1100          014       T
    107      71   01000111      1100          014       T
    110      72   01001000      1100          014       T
    111      73   01001001      1100          014       T
    112      74   01001010      1100          014       T
    113      75   01001011      1100          014       T
    114      76   01001100      1100          014       T
    115      77   01001101      1100          014       T
    116      78   01001110      1100          014       T
    117      79   01001111      1100          014       T
    120      80   01010000      1100          014       T
    121      81   01010001      1100          014       T
    122      82   01010010      1100          014       T
    123      83   01010011      1100          014       T
    124      84   01010100      1100          014       T
    125      85   01010101      1100          014       T
    126      86   01010110      1100          014       T
    127      87   01010111      1100          014       T
    130      88   01011000      1100          014       T
    131      89   01011001      1100          014       T
    132      90   01011010      1100          014       T
    133      91   01011011      1100          014       T
    134      92   01011100      1100          014       T
    135      93   01011101      1100          014       T
    136      94   01011110      1100          014       T
    137      95   01011111      1100          014       T
```

M7261-8 Rev A

```
    140      96   01100000      1100          014       T
    141      97   01100001      1100          014       T
    142      98   01100010      1100          014       T
    143      99   01100011      1100          014       T
    144     100   01100100      1100          014       T
    145     101   01100101      1100          014       T
    146     102   01100110      1100          014       T
    147     103   01100111      1100          014       T
    150     104   01101000      1100          014       T
    151     105   01101001      1100          014       T
    152     106   01101010      1100          014       T
    153     107   01101011      1100          014       T
    154     108   01101100      1100          014       T
    155     109   01101101      1100          014       T
    156     110   01101110      1100          014       T
    157     111   01101111      1100          014       T
    160     112   01110000      1100          014       T
    161     113   01110001      1100          014       T
    162     114   01110010      1100          014       T
    163     115   01110011      1100          014       T
    164     116   01110100      1100          014       T
    165     117   01110101      1100          014       T
    166     118   01110110      1100          014       T
    167     119   01110111      1100          014       T
    170     120   01111000      1100          014       T
    171     121   01111001      1100          014       T
    172     122   01111010      1100          014       T
    173     123   01111011      1100          014       T
    174     124   01111100      1100          014       T
    175     125   01111101      1100          014       T
    176     126   01111110      1100          014       T
    177     127   01111111      1100          014       T
                  ********
                  *******/( A(PIN #05) IS  CONT STACKFLOW (1)L
                  ******/( B(PIN #06) IS  CONT FORM SYNC (1)L
                  *****/( C(PIN #07) IS  CONT CLK INT (1)L
                  ****/( D(PIN #04) IS  CONT STOP (1)L
                  ***/( E(PIN #03) IS  DPH REC INT (1)L
                  **/( F(PIN #02) IS  DPH XMIT INT (1)L
                  */( G(PIN #01) IS  DPG WAIT L
                  /( H(PIN #15) IS  DPG ? DEL (1)L
```

16

M7261-8 REV.A

ROM LISTING

A09A2 27 JUL 72 23:A09A2:0

```
                    // =V4 (PIN # 9) CONF MPC 04 L
                    *// =V3 (PIN #10) CONF MPC 01 L
                    ***// =V2 (PIN #11) CONF MPC 02 L
                    *****// =V1 (PIN #12) CONF MPC 00 L
                    *****          OCTAL
                    *****          DATA
OCTAL  DECIMAL      HGFEDCBA
ADDRESS ADDRESS
   200     128      10000000      1001          011          STKFL
   201     129      10000001      1010          012          PWRF
   202     130      10000010      1001          011          STKFL
   203     131      10000011      1011          013          LCLK
   204     132      10000100      1001          011          STKFL
   205     133      10000101      1010          012          PWRF
   206     134      10000110      1001          011          STKFL
   207     135      10000111      0101          005          RCD
   210     136      10001000      1001          011          STKFL
   211     137      10001001      1010          012          PWRF
   212     138      10001010      1001          011          STKFL
   213     139      10001011      1011          013          LCLK
   214     140      10001100      1001          011          STKFL
   215     141      10001101      1010          012          PWRF
   216     142      10001110      1001          011          STKFL
   217     143      10001111      0101          005          RCD
   220     144      10010000      1001          011          STKFL
   221     145      10010001      1010          012          PWRF
   222     146      10010010      1001          011          STKFL
   223     147      10010011      1011          013          LCLK
   224     148      10010100      1001          011          STKFL
   225     149      10010101      1010          012          PWRF
   226     150      10010110      1001          011          STKFL
   227     151      10010111      0111          007          XMIT
   230     152      10011000      1001          011          STKFL
   231     153      10011001      1010          012          PWRF
   232     154      10011010      1001          011          STKFL
   233     155      10011011      1011          013          LCLK
   234     156      10011100      1001          011          STKFL
   235     157      10011101      1010          012          PWRF
   236     158      10011110      1001          011          STKFL
   237     159      10011111      0111          007          XMIT
   240     160      10100000      1001          011          STKFL
   241     161      10100001      1010          012          PWRF
   242     162      10100010      1001          011          STKFL
   243     163      10100011      1011          013          LCLK
   244     164      10100100      1001          011          STKFL
   245     165      10100101      1010          012          PWRF
   246     166      10100110      1001          011          STKFL
   247     167      10100111      0101          005          RCD
   250     168      10101000      1001          011          STKFL
   251     169      10101001      1010          012          PWRF
   252     170      10101010      1001          011          STKFL
   253     171      10101011      1011          013          LCLK
   254     172      10101100      1001          011          STKFL
   255     173      10101101      1010          012          PWRF
   256     174      10101110      1001          011          STKFL
   257     175      10101111      0101          005          RCD
   260     176      10110000      1001          011          STKFL
   261     177      10110001      1010          012          PWRF
   262     178      10110010      1001          011          STKFL
   263     179      10110011      1011          013          LCLK
   264     180      10110100      1001          011          STKFL
   265     181      10110101      1010          012          PWRF
   266     182      10110110      1001          011          STKFL
   267     183      10110111      1110          016          STOP
   270     184      10111000      1001          011          STKFL
   271     185      10111001      1010          012          PWRF
   272     186      10111010      1001          011          STKFL
   273     187      10111011      1011          013          LCLK
   274     188      10111100      1001          011          STKFL
   275     189      10111101      1010          012          PWRF
   276     190      10111110      1001          011          STKFL
   277     191      10111111      0010          002          WAIT
                    **********
                    **********// A(PIN #08) IS  CONB STACKFLOW (11)L
                    ********// B(PIN #06) IS  CONH PDWN SYNC (11)L
                    ******// C(PIN #07) IS  CONI LCLK INT (11)L
                    ****// D(PIN #04) IS  CONE STOP (11)L
                    ***// E(PIN #03) IS  CONH RCD INT (11)L
                    **// F(PIN #02) IS  CONG XMIT INT (11)L
                    *// G(PIN #25) IS  CONF WAIT L
                    // H(PIN #5) IS  CONE DEL (11)L
```

```
                                  /( =Y4 (PIN # 9) CONF MPC 04 L
                                  */( =Y3 (PIN #10) CONF MPC 01 L
                                  **/( =Y2 (PIN #11) CONF MPC 02 L
                                  ***/( =Y1 (PIN #12) CONF MPC 00 L
  OCTAL DECIMAL                   ****          OCTAL
ADDRESS ADDRESS   HGFEDCBA        ****          DATA
    300     192   11000000        1001          011       STKFL
    301     193   11000001        1010          012       PWRF
    302     194   11000010        1001          011       STKFL
    303     195   11000011        1011          013       LCLK
    304     196   11000100        1001          011       STKFL
    305     197   11000101        1010          012       PWRF
    306     198   11000110        1001          011       STKFL
    307     199   11000111        0101          005       RCD
    310     200   11001000        1001          011       STKFL
    311     201   11001001        1010          012       PWRF
    312     202   11001010        1001          011       STKFL
    313     203   11001011        1011          013       LCLK
    314     204   11001100        1001          011       STKFL
    315     205   11001101        1010          012       PWRF
    316     206   11001110        1001          011       STKFL
    317     207   11001111        0101          005       RCD
    320     208   11010000        1001          011       STKFL
    321     209   11010001        1010          012       PWRF
    322     210   11010010        1001          011       STKFL
    323     211   11010011        1011          013       LCLK
    324     212   11010100        1001          011       STKFL
    325     213   11010101        1010          012       PWRF
    326     214   11010110        1001          011       STKFL
    327     215   11010111        0111          007       XMIT
    330     216   11011000        1001          011       STKFL
    331     217   11011001        1010          012       PWRF
    332     218   11011010        1001          011       STKFL
    333     219   11011011        1011          013       LCLK
    334     220   11011100        1001          011       STKFL
    335     221   11011101        1010          012       PWRF
    336     222   11011110        1001          011       STKFL
    337     223   11011111        0111          007       XMIT
```

M7261-8 REV A

```
    340     224   11100000        1001          011       STKFL
    341     225   11100001        1010          012       PWRF
    342     226   11100010        1001          011       STKFL
    343     227   11100011        1011          013       LCLK
    344     228   11100100        1001          011       STKFL
    345     229   11100101        1010          012       PWRF
    346     230   11100110        1001          011       STKFL
    347     231   11100111        0101          005       RCD
    350     232   11101000        1001          011       STKFL
    351     233   11101001        1010          012       PWRF
    352     234   11101010        1001          011       STKFL
    353     235   11101011        1011          013       LCLK
    354     236   11101100        1001          011       STKFL
    355     237   11101101        1010          012       PWRF
    356     238   11101110        1001          011       STKFL
    357     239   11101111        0101          005       RCD
    360     240   11110000        1001          011       STKFL
    361     241   11110001        1010          012       PWRF
    362     242   11110010        1001          011       STKFL
    363     243   11110011        1011          013       LCLK
    364     244   11110100        1001          011       STKFL
    365     245   11110101        1010          012       PWRF
    366     246   11110110        1001          011       STKFL
    367     247   11110111        1110          016       STOP
    370     248   11111000        1001          011       STKFL
    371     249   11111001
```

digital EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

DRAWING DIRECTORY

CUSTOMER PRINT SET INDEX

SEQUENCE		SEQUENCE
MODULE UTILIZATION	D_MU_MM11_L_1	MFG. PRINT SET
BLOCK DIAGRAM	D_BD_MM11_L 2	MFG. TEST PRO. FOR MM11/K,L,M,S & SP
TIMING DIAGRAM	D_TD_MM11_L_3	A-SP-MM11-L-5
* MEMORY DRIVERS	E_SC_G231_0_1	
* CONTROL & DATA LOOPS	E_CS_G110_0_1	
STACK SCHEMATIC	E_CS_H213_0_1	
STACK SCHEMATIC	E_CS_H214_0_1	
BLOCK DIAGRAM	D-BD-MM11-S-2	
4K MEMORY	A-PL-MM11-K-0	
8K MEMORY	A-PL-MM11-L-0	

THIS IS PRINT SET

UNIT VARIATIONS

VARIATION	TITLE	PRINT SET TYPE: MM11_L
MM11_K	4K 16 BIT 18 MIL MEMORY	X
MM11_L	8K 16 BIT 18 MIL MEMORY	X

* SPECIAL REVISION PRINTS ARE AVAILABLE ON "C" ETCH REV. MODULES.
CARE SHOULD BE TAKEN TO INSURE THAT PROPER PRINTS ARE ORDERED.

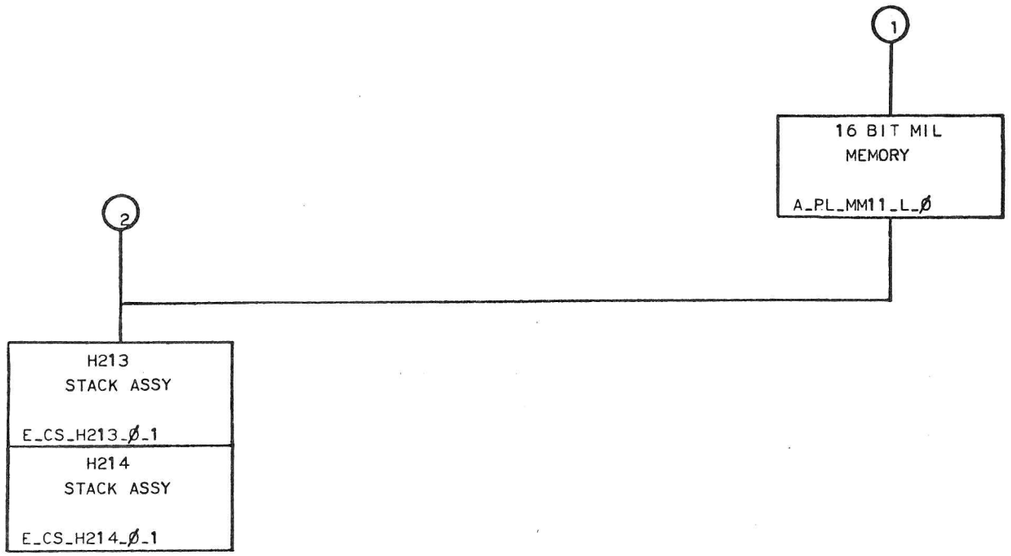
REVISIONS	DATE	CHG. NO.	REV
	9/72	MM11L-00001	A
	11-72	MM11L00002	B
	1-73	MISC-00107	C
	2-73	MISC-00111	D
	2-73	MISC-00112	E
	2-73	MISC-00113	F

USED ON OPTION/MODEL	
MM11_K	
MM11_L	

DRN. L Balogh	DATE 1-25-72	TITLE: 16 BIT 18 MIL MEMORY
CHK'D. L Balogh	DATE 1-25-72	
PROJ ENG. P Dewood	DATE 1-25-72	
PROD. R K [illegible]	DATE 1-26-72	SIZE B / CODE DD / NUMBER MM11-L / REV F
FIELD SERV. [illegible]	DATE 1-27	
SHEET 1 OF 3		DIST

DRB 106

97



TITLE		SIZE	CODE	NUMBER	REV
16 BIT 18 MIL MEMORY	SHEET 2 OF 3	B	DD	MM11_L	-

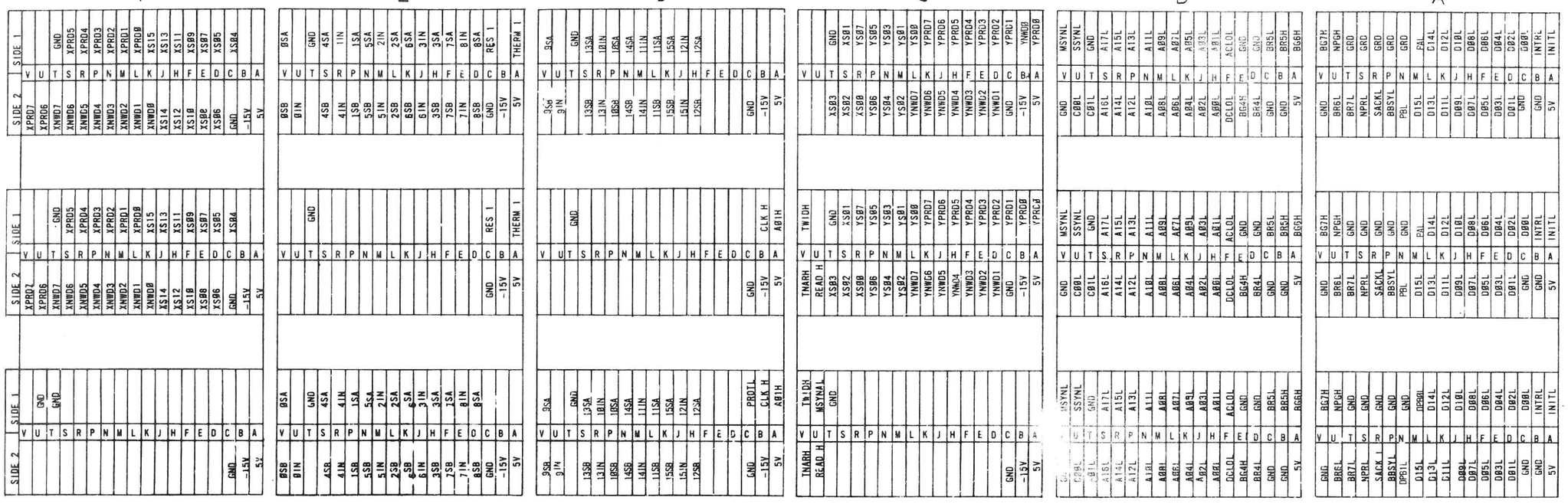
ELECTRICAL							CUSTOMER PRINT SET							SET	MECHANICAL					
			DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO.	MM11_L						MFG	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO.
				*	1	MODULE UTILIZATION	✓								1	A_PL_MM11_L_Ø	*	1	MEMORY	✓
X			D_BD_MM11_L_2	*	1	BLOCK DIAGRAM	✓													
X			D_TD_MM11_L_3	*	1	TIMING DIAGRAM	✓									A_PS_3010654_0_0			PURCHASE SPEC	
X			E_CS_G231_Ø_1	#	5	MEMORY DRIVER	✓													
X			E_CS_G11Ø_Ø_1 E9	#	5	CONTROL & DATA LOOPS	✓													
X			D-BD-MM11-S-2	#		BLOCK DIAGRAM	✓													
X			A-PL-MM11-K-0		1	4K MEMORY									2	B_DD_H214_Ø_/	#	2	STACK SCHEMATIC	
X			A-PL-MM11-L-0		1	8K MEMORY	✓									B_DD_H213_Ø	#	2	STACK SCHEMATIC	
X		2	E_CS_H213_Ø_1	#	2	STACK SCHEMA	✓													
X			E_CS_H214_Ø_1	#	2	STACK SCHEMA	✓									A-PL_G645_Ø_-Ø		1	STACK BOARD	
			A-SP-G109-0-8		1	G109,G110 CONT & DATA LOOP MFG. SPEC.														
			A-SP-G231-0-8		1	MEMORY DRIVER MFG. SPEC														
			A-SP-MM11-L-4		1	MM11-K,-L,-S &-SP MFG. TEST SPEC.														
	X		A-SP-MM11-L-5		29	MFG. TEST PRO. MM11/K,L,M,S & SP														

TITLE		SIZE	CODE	NUMBER	REV
16 BIT 18 MIL MEMORY	SHEET 3 OF 3	B	DD	MM11_L	F

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

PIN SIDE VIEW OF BACKPLANE

THESE 2 SLOTS ARE UNIBUS WIRED ON ALL 3 CONNECTORS


F
E
D
C
B
A
SIDE 1
SIDE 2
V U T S R P N M L K J H F E D C B A
XPRQ7 XPRQ6 XNWD7 XNWD6 XNWD5 XPRQ4 XPRQ3 XPRQ2 XPRQ1 XPRQØ XS15 XS13 XS11 XS09 XS07 XS05 XS04 -15V 5V
GND XPRQ5 XPRQ4 XPRQ3 XPRQ2 XPRQ1 XPRQØ XS15 XS13 XS11 XS09 XS07 XS05 XS04 -15V 5V
ØSA Ø1N GND 4SA 41N 1SA 5SA 21N 2SA 6SA 31N 3SA 7SA 81N 8SA RES 1 THERM 1 5V
GND CLK H A01H 5V
ØSA Ø1N GND 13SA 131N 1ØSA 14SA 141N 11SA 15SA 121N 12SA PROTL CLK H A01H 5V
TWIDH TNARH READ H XS03 XS02 XS00 YS06 YS04 YS02 YNWD7 YNWD6 YNWD5 YNWD4 YNWD3 YNWD2 YNWD1 GND YPRQ8 YPRQ7 5V
MSYNL SSYNL GND A17L A15L A13L A11L A09L A07L A05L A03L A01L ACLOL BG4H BR4L GND BR5L BR5H BG6H 5V
BG7H NPGH GND GND GND GND GND NPGH BR6L BR7L NPRL SACKL BBSYL DPBIL D15L D13L D11L D09L D07L D05L D03L D01L GND GND 5V
INTRL INITL

H213, H214 STACK
(F,E,D,C) (QUAD B 1½)
UNIBUS CONN OR TERM (A,B)

DRIVE
(F,E,D,C,B,A)(HEX B 1½)
G231

SENSE - CONTROL
(F,E,D,B,C,A) (HEX B 1½)
G110

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO	ITEM NO.
MMII-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: XXX = .005, XX = .02, X = 1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —//—
FINISH —//—

DRN		DATE 1/14/72
CHK'D	L Balagh	DATE 1-4-72
ENG	D Durant	DATE -21-72
PROJ ENG	D Durant	DATE -25-72
PROD	R K Peterson	DATE 1-31-72

NEXT HIGHER ASSY: B-DD-MMII-L
SCALE —
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: MODULE UTILIZATION

SIZE D | CODE MU | NUMBER MMII-L-1 | REV
DIST

REVISIONS			
CHK	CHANGE NO	REV	

DRUNING 40-522 (5-68)
DEC FORM NO DRD 102-B

drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

NOTES:
1. ✳ ALL ARROWS SHOW SIGNAL FLOW DIRECTION.
2. ✳✳ MATRIX SHOWN IS FOR ILLUSTRATION ONLY.
3. ✳✳✳ ACTUAL MATRIX HAS { Y AXIS 8PRD, 8NRD, 8SS / X AXIS 4K 8PRD, 8NRD, 8SS / X AXIS 8K 8PRD, 8NRD, 16SS

UNIBUS

BUS A0L

BUS INITL
BUS DCLO L
BUS DATA(0-15) L
BUS C0L, C1L
BUS MSYNL
BUS SSYNL
BUS A1L, A14L
BUS A15L, 16L, 17L

BUS A2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

BUS DCLOL

G110 CONTROL & DATA LOOPS MODULE

BYTE MASKING

16 DATA LOOPS

STROBE 0 & 1 H
RESET 0 & 1 L
LOAD 0 & 1 H

DATA FF
INHIBIT DRIVER
SENSE AMP
BUS DRIVER

TIMING CHAIN
MODE CONTROLS
BUS RECEIVERS
DEVICE SELECTOR
INTERLEAVE CONTROL

TINH H
DATA OUT H
DATA H

I 0 H
CLK H
TMAR H
TWID H
READ H

BUS RECEIVERS
ADDRESS LATCHES
FIRST LEVEL DECODE

ADDRESS BITS USED	CKTS
A02, 03	YPRD 0-7
I 0 H	YNWD 0-7
A04, 5, 6	YSS 0-7
A07, 8, 9	XPRD 0-7
	XNWD 0-7
A10, 11, 12, 13	XSS 0-15
	0-7 FOR 4K

ADDRESS
TDR
TSS
READ-WRITE
STACK DISCHARGE CKT READ = GND WRITE = -15
X & Y CURRENT GENERATOR (XIG, YIG)
DC LO CKT (-15 V SERIES TRANSISTOR)
V REF CKT
CURRENT CONTROL & TEMPERATURE COMPENSATION

G231 DRIVER MODULE

YDR 0-7
YSS 0-7
XDR 0-7
XSS 0-15

H213, 214 MEMORY STACK
4 OR 8K X 16 BIT

I — 16 CKTS
SA
SB

4096 CORES FOR 4K
8192 CORES FOR 8K
} PER BIT

X-Y DIODE MATRICES ✳✳
X DRIVE LINES
Y DRIVE LINES

PRD 0
NWD 0
SS0
SS1
SS2
SS3
PRD 1
NWD 1
✳✳✳

R1
THERMISTER RESISTOR
RT1

REVISIONS	REV	CHK
CHANGE NO.		

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MM11-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL

FINISH

	NAME	DATE
DRN	P. Carberry	11/19/71
CHK'D	J. Fraleigh	1-25-72
ENG	P Durant	1-25-71
PROJ. ENG.	P Durant	1-25-71
PROD.	R K Peterson	1-26-72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: BLOCK DIAGRAM (MM11-L)

NEXT HIGHER ASSY.: B-DD-MM11-L

SIZE D | CODE BD | NUMBER MM11-L-2 | REV.

SCALE

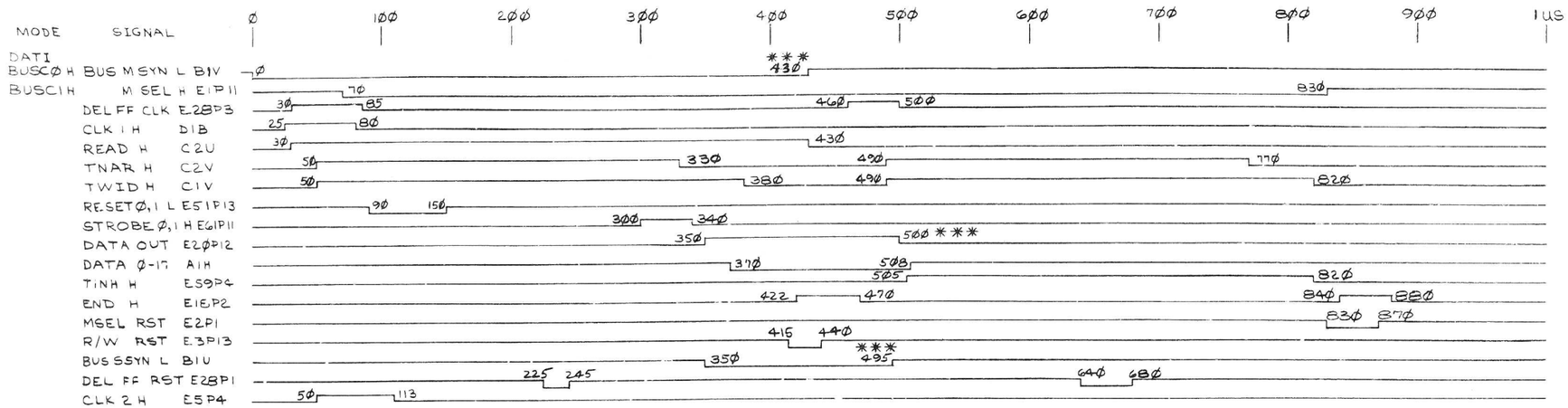
SHEET 1 OF 1 | DIST.

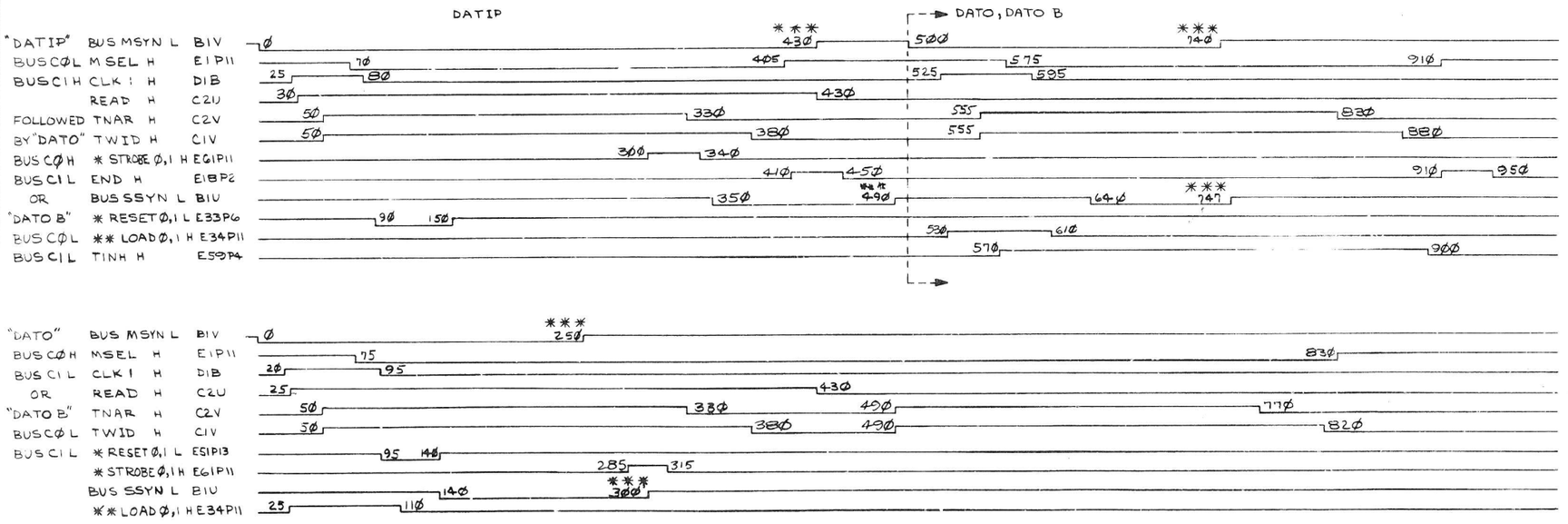
DEC FORM NO DRD 102-B

SIZE D | CODE BD | NUMBER MM11-L-2 | REV

101

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.




DATIP
DATO, DATO B
"DATIP" BUS MSYN L B1V
BUSCØL M SEL H E1P11
BUSCIH CLK I H D1B
READ H C2U
FOLLOWED TNAR H C2V
BY "DATO" TWID H C1V
BUS CØ H * STROBEØ,1 H E61P11
BUS CI L END H E1EP2
OR BUS SSYN L B1U
"DATO B" * RESETØ,1 L E33P6
BUS CØ L ** LOADØ,1 H E34P11
BUS CI L TINH H E59P4
"DATO" BUS MSYN L B1V
BUS CØ H MSEL H E1P11
BUS CI L CLK I H D1B
OR READ H C2U
"DATO B" TNAR H C2V
BUS CØ L TWID H C1V
BUS CI L * RESETØ,1 L E51P13
* STROBEØ,1 H E61P11
BUS SSYN L B1U
** LOADØ,1 H E34P11

NOTES:

1. ALL SIGNALS ARE SHOWN ON DATI, DATO OR DATO B ARE AS SHOWN ON DATI TIMING.
* 2. RESET L AND STROBE - DO NOT OCCUR IN DATO MODE. THEY ONLY OCCUR FOR THE BYTE NOT BEING ADDRESSED IN DATO B MODE.
** 3. LOAD H OCCURS FOR BOTH BITS IN DATO MODE AND ONLY FOR THE ADDRESSED BYTE IN THE DATO B MODE.
*** 4. ACTUAL TIME DEPENDS ON BUS AND PROCESSOR DELAYS.
5. ALL SIGNALS ON G109 OR G110 MODULE

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MMII-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES

DECIMALS	ANGLES
XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —"—

FINISH —"—

DRN F Carberry	DATE 12/3/71	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D F Ralph	DATE 1-27-72	
ENG P D Lawrence	DATE 1-25-72	TITLE TIMING DIAGRAM (MMII-L, MMII-K)
PROJ. ENG. P D Lawrence	DATE 1-25-72	
PROD. K M Peterson	DATE 1-27-72	
NEXT HIGHER ASSY B-DD-MMII-L		SIZE D CODE TD NUMBER MMII-L-3 REV
SCALE —"—		
SHEET 1 OF 1		DIST

REVISIONS

REV	CHANGE NO	CHK

BROWNING AD-524 15840

DEC-D-DRW-NO DRD 102-B

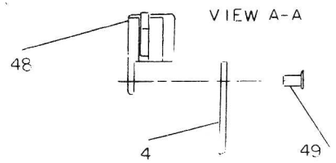
SIZE D CODE TD NUMBER MMII-L-3 REV

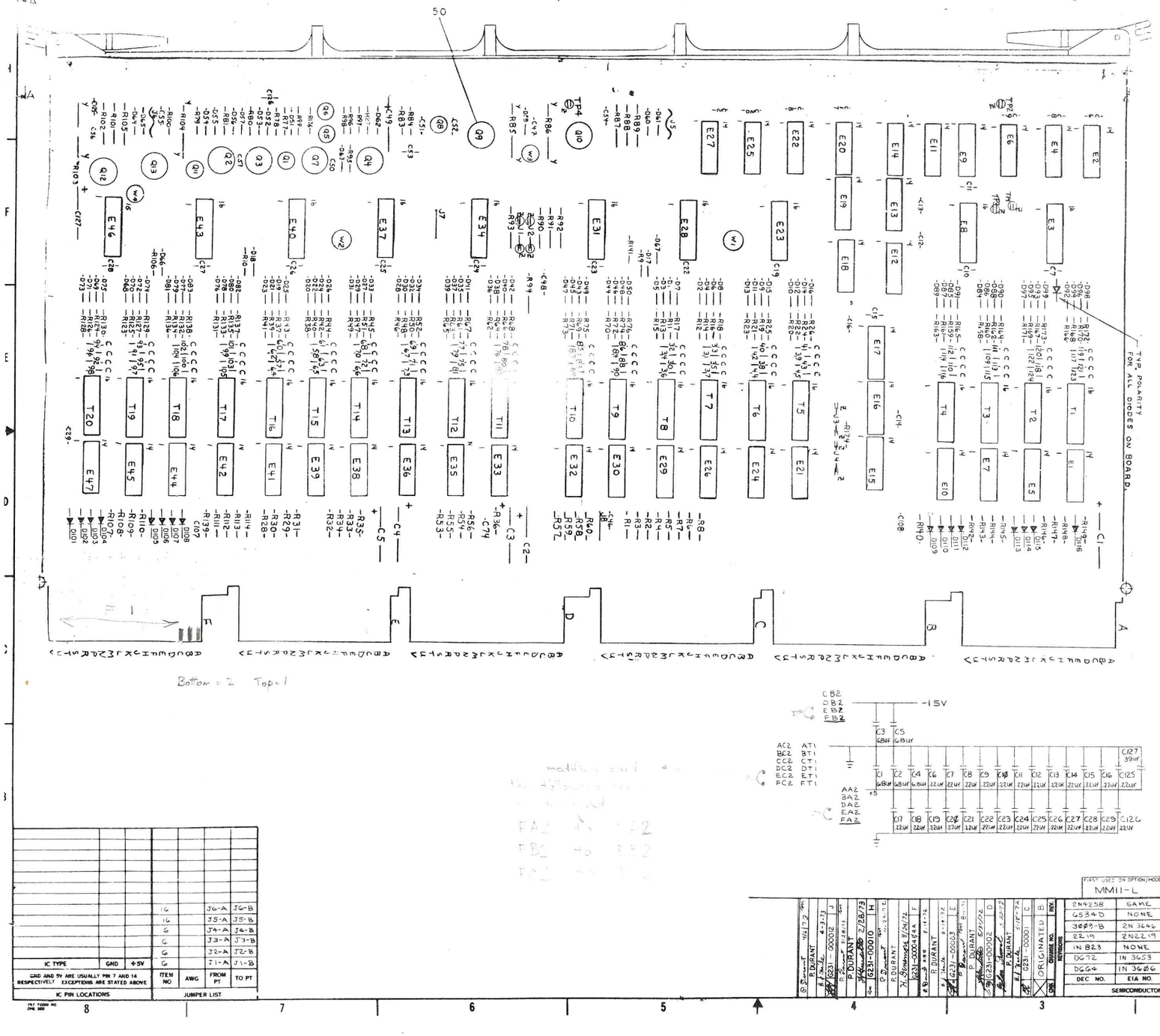
A B C D

8 7 6 5 4 3 2 1

NOTES:
1. J5 & J6 SHOULD BE 1.5 INCHES OF INSULATED LOOP.
2. IC 4008 TO BE MARKED 4008X OR 4008°←WHITE DOT

VIEW A-A





103

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

BUS A1Ø L BN2 — E16 7380
BUS A11 L BN1 — E16 7380
BUS A09 L BM1 — E15 7380
BUS A08 L BM2 — E15 7380
BUS A07 L BL1 — E15 7380
BUS A03 L BT1 — E17 7380
BUS A02 L BT2 — E17 7380
CDL2 A01H — DA1

E9 7380 (4,5,3 / 6,7,2)
10K R174 +5V
BUSA13 L BP1 — J3 J4

MD2 A1ØH — E18 74H74
MD2 A11H — E18 74H74
MD2 A09H — E19 74H74
MD2 A09L
MD2 A08H — E20 74H74
MD2 A07H — E13 74H74
MD2 A03H — F13 74H74
MD2 A03L
MD2 A02H — E14 74H74
MD2 A01H — E11 74H74
DB1
CDL2 CLKIH

BUSA06 L BL2 — E15 7380
BUS A12 L BP2 — E17 7380
BUS A05 L BK1 — E16 7380
BUSA04 L BK2 — E16 7380

MD2 A05H — E12 74H74
MD2 A04H — E12 74H74

E9 7380 SPARE (9,10,14 / 12,11,3)
E9 7380 SPARE (9,10,14 / 12,11,3)
74H74 SPARE E11 (10,12,9,8 / 11,13)

WRITE H
CDL2 READ H — CV2 — E6 1Ø74HØ4
CDL2 TNAR H — CV2 — TNARH
E4 (12,13,11 / 5,4,6 / 10,9,8 / 2,1,3) 1Ø74HØØ (4 CKTS.)
TWIDH
TSSH
T.P.3

MD2YS1L — E22 74H1Ø (2,13,1 → 12)
MD2YSØL — E22 74H1Ø (9,10,11 → 8)
MD2 XS3L — E22 74H1Ø (4,5,3 → 6)
MD2 XS2L — E25 74H1Ø (1,13,2 → 12)
MD2 XS1L — E25 74H1Ø (11,9,10 → 8)
MD2 XSØL — E25 74H1Ø (3,4,5 → 6)

**

	J3	J4
4K	IN	OUT
8K	OUT	IN

*** ALL INPUTS ARE FROM UNIBUS (BUS xxxL) OR G1Ø9 OR G11Ø (CDL2XXXL)

*** CDL2 TWID H CV1 — E2 (4,6,12)
CDL2 READ H CV2 — E2 (5,6,11)
CDL2 TNAR H CV2 — E2 (2,13,11)
WRITE H — E2 (1,3)
1Ø74HØØ (3 CKTS.)
T.P.2 — MD2 TDR H

E6 1Ø74HØ4 (1 → 2)
+5V
100Ω R77 — 330Ω R78 — 470Ω R79
D51 — Q1 G534 — 1ØØ8 Q2
330Ω R80
D52 D53 D54 D55 MD2SD — STACK DISCHARGE
D56 D57
100Ω RB1 — Q3 1Ø
196Ω 300Ω — EC1 EA1 — VREF
C59 .22UF
6.2V D58 — C48 .22UF — R9Ø 147Ω — R94 147Ω
C47 .22UF — R91 909Ω J1 — R92 1.78K J2 — R93 470Ω
Q4 2219 — R95 2.2K
C49 6.8 UF
R27 100Ω
R97 15K — R98 330Ω — Q6 4258
R99 1.5K — R176 4.7K — Q7 1ØØ8
C5Ø .22UF
-15V
X-Y REFFERENCE SUPPLY
TWID H — R96 150Ω — Q5 3ØØ9B

CDL2 TWIDH — CV1 — E6 1Ø74HØ4
E6 1Ø74HØ4
+5V
750Ω R83 — 1.5K R84 — Q8 4258
C51 39 PF
T.P.
470 PF C52
R85 16.9Ω — R86 16.9Ω
Q9 3762 — Q10 — CURRENT LOOP J5 — MD2IY Y AXIS TO WRITE SWITCHES AND READ DRIVERS
T.P.4
D60 — R89 1K — D61
-15V
R87 1.5K — R88 1.5K
.22 UF C54
D62 — .22 UF C53
CDL2 READ H — CV2 — E6 1ØH74Ø4 — T.P.1 MD2 READ
E6 1Ø74HØ4
D63
1.5K R1ØØ — Q11 4258
C55 39 PF
C56 68ØPF
R1Ø1 1.5K — R1Ø2 1.5K
R1Ø3 16.9Ω — Q12 — R1Ø4 16.9Ω — Q13 3762
CURRENT LOOP J6 — MD2IX X AXIS TO WRITE SWITCHES AND READ DRIVERS
D64 — R1Ø5 1K — D65
-15V
J7

* THIS CIRCUIT IS ON STACK BOARD

REVISIONS	REV	CHANGE NO	CHK

EC FORM NO
ORD 102-B

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

FINISH —

		DATE
DRN F. Carberry		9-24-71
CHK'D L. Tobyn		1-21-72
ENG. P.D Durant		1-25-72
PROJ. ENG. P. Durant		1-25-72
PROD. R.K Peterson		1-26-72

NEXT HIGHER ASSY.

SCALE —

SHEET 2 OF 4

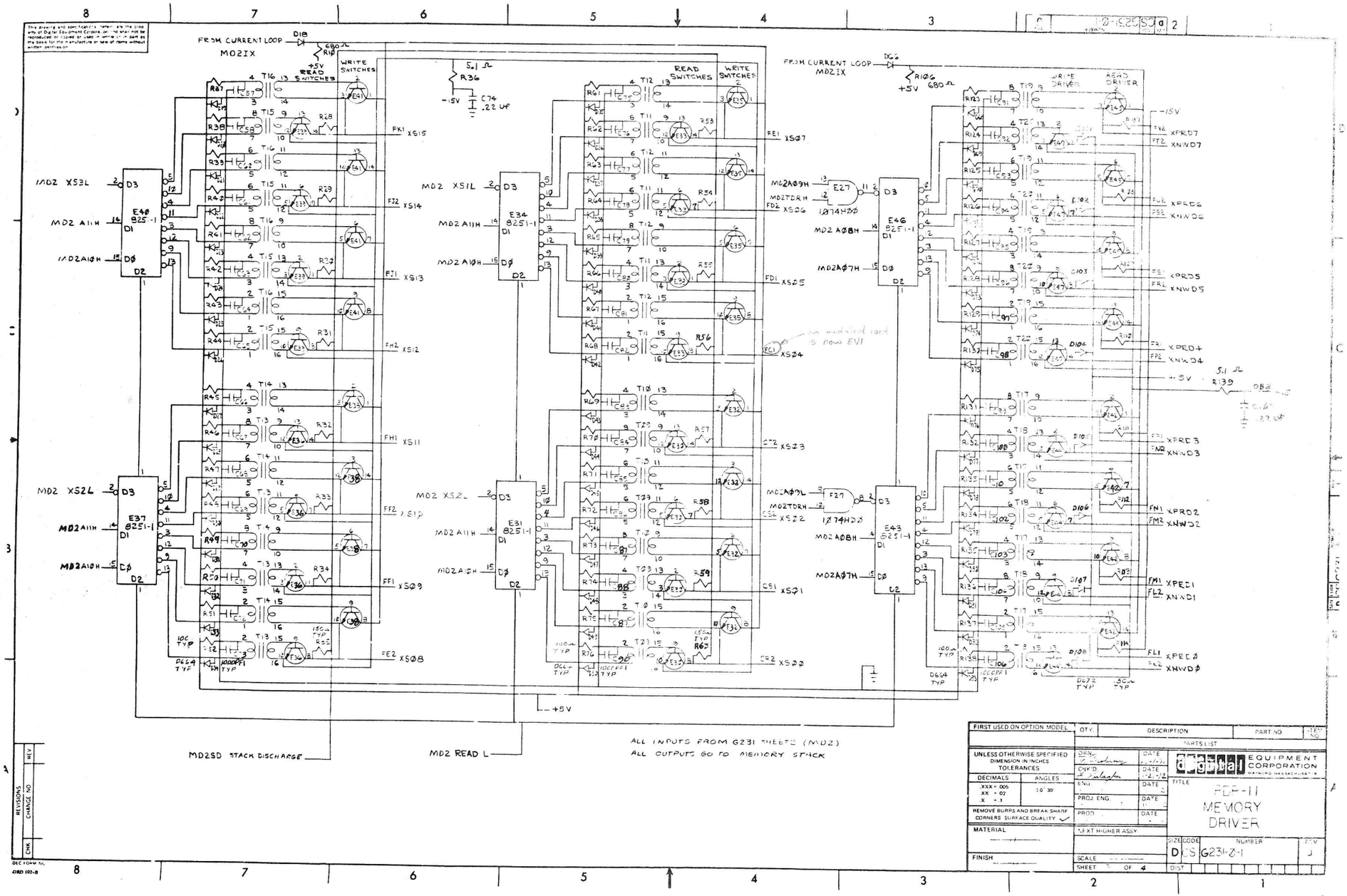
digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE
PDP-11 MEMORY DRIVER

SIZE	CODE	NUMBER	REV
D	CS	G231-Ø-1	J

DIST.

This drawing and information is the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



REVISIONS	REV	CHANGE NO	CHK

FIRST USED ON OPTION MODEL	QTY	DESCRIPTION	PART NO	ITEM NO
		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN	DATE	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
DECIMALS .XXX ± .005 .XX ± .02 X ± .1 / ANGLES ± 30'	CHK'D	DATE 12/72	TITLE: PDP-11 MEMORY DRIVER
	ENG	DATE	
	PROJ. ENG.	DATE	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓	PROD	DATE	
MATERIAL	NEXT HIGHER ASSY		SIZE D / CODE 05 / NUMBER G231-0-1 / REV J
FINISH	SCALE		
	SHEET 3 OF 4		DIST

DEC FORM NO. ORD 102-B

This drawing and specification, together with the proprietary Digital Equipment Corporation information contained herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacturing or sale of items without written permission.

FROM CURRENT LOOP MD2 IY

D17

R3 680Ω +5V

READ SWITCHES

WRITE SWITCHES

MD2 YS1L

MD2 A05H

MD2 A04H

E28 8251-1

MD2 YS0L

MD2 A03H

MD2 A02H

E23 8251-1

MD2 READ L

+5V

CR1 YS07

CP2 YS06

CP1 YS05

CN2 YS04

CN1 YS03

CM2 YS02

CM1 YS01

C1 YS00

100Ω TYP

1000PF TYP

150Ω TYP

R1 R2 R3 R4 R5 R6 R7 R8

J8

−15V

C46 .22 UF

MD2 SD

STACK DISCHARGE

FROM CURRENT LOOP MD2IY

D67

R141 680Ω +5V

WRITE DRIVER

READ DRIVER

MD2 TDRH

MD2 A03H

MD2 A02H

MD2 A01H

E27 1074H00

E8 8251-1

MD2 TDRL

MD2 A03L

MD2 A02L

MD2 A01L

E27 1074H00

E3 8251-1

D666 TYP

100Ω TYP

−15V

+5V

5.1Ω 9.4Ω

C100 .22 uF

YPRD7 YNWD7

YPRD6 YNWD6

YPRD5 YNWD5

YPRD4 YNWD4

YPRD3 YNWD3

YPRD2 YNWD2

YPRD1 YNWD1

YPRD0 YNWD0

R142 R143 R144 R145 R146 R147 R148 R149

150Ω

ALL INPUTS FROM G231 SHEET 2 (MD2)
ALL OUTPUTS TO MEMORY STACK

FIRST USED ON OPTION MODEL	QTY	DESCRIPTION	PART NO
	PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: XXX ± .005, XX ± .02, X ± .1
ANGLES: 10' 30"
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN — DATE 12-7-72
CHK'D — DATE 12-7-72
ENG — DATE
PROJ ENG — DATE
PROD — DATE
NEXT HIGHER ASSY
SCALE
SHEET 4 OF 4

DIGITAL EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: PDP-11 MEMORY DRIVER

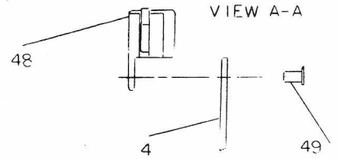
SIZE D | CODE | NUMBER G231-0-1 | REV J | DIST

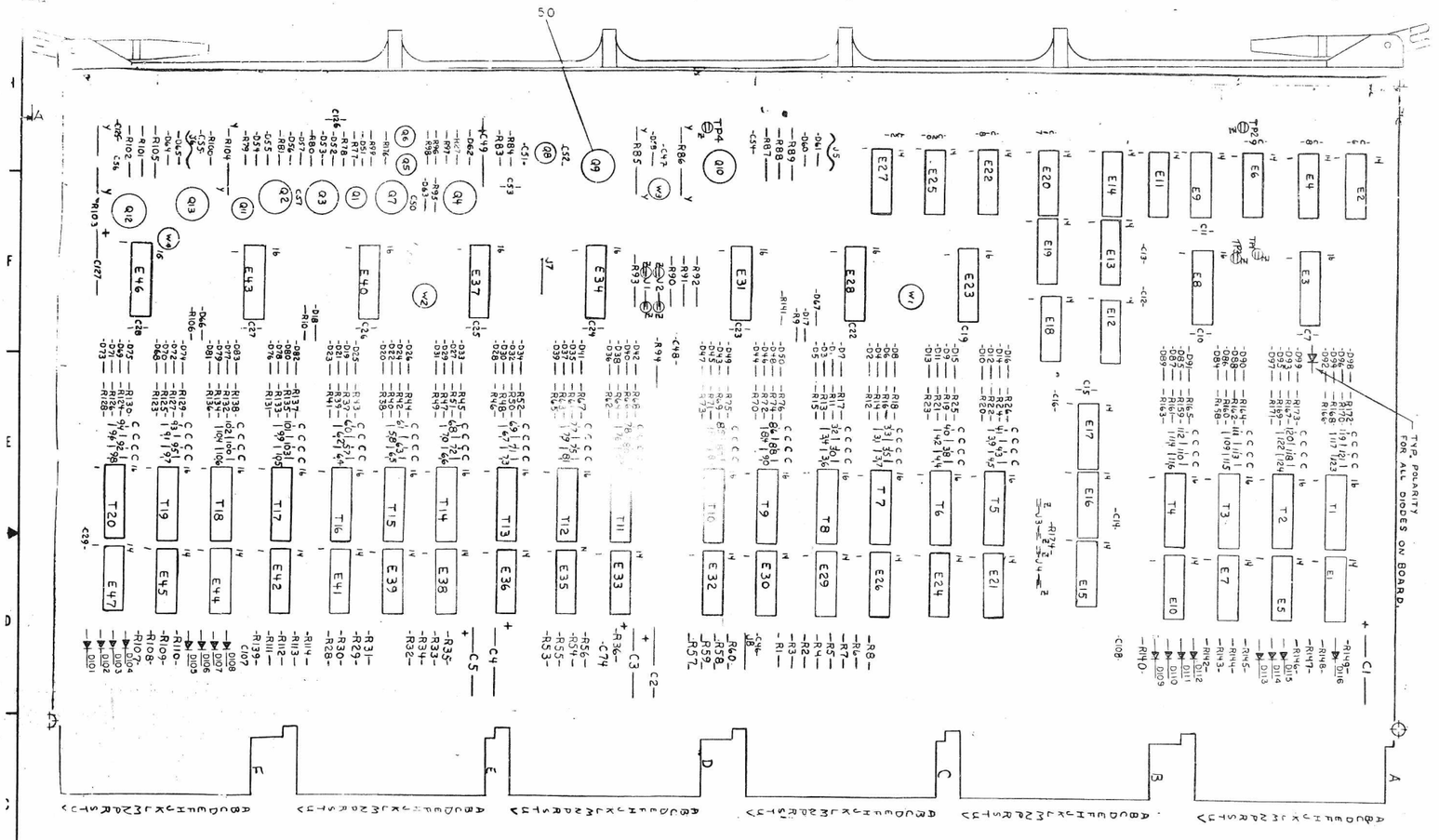
REVISIONS: REV | CHANGE NO | CHK

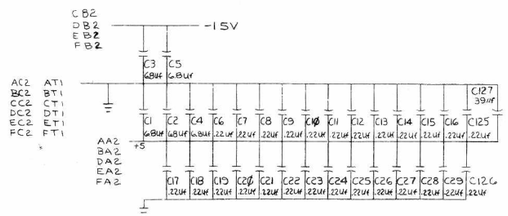
DEC-DRW-NO D8D 172-0

NOTES:
1. J5 & J6 SHOULD BE 1.5 INCHES OF INSULATED LOOP.
2. IC 4008 TO BE MARKED 4008X OR 4008° ←WHITE DOT

VIEW A-A







COMPONENT SUBSTITUTION LIST

ITEM NO.	ORIGINAL PART DESCRIPTION	ORIGINAL PART NO.	SUBSTITUTE PART DESCRIPTION	SUBSTITUTE PART NO.	
SEE NOTE 2	38 IC 4011 QUAD TRANSISTOR	1511102	IC 4008 QUAD TRANSISTOR	1510015	*
	39 IC DEC7380	1910390	IC DEC 380	1909485	*
	42 IC 1074H00	1910462	IC 74H00	1909056	*
	44 IC 1074H04	1910465	IC 74H04	1909931	*

1	R176	RES 4.7K 1/4W 5%	1300447		60
2	J7, J8	JUMPER MACH. INSERTED	9009185		59
1	C52	CAP 470 PF 100V 5%	1000024		58
1	C56	CAP 680 PF 100V 5%	1000026		57
1	C-27	CAP 39UF 10V	1000076		56
4		SCREW, NYLON 6-32	9008212		55
4	W1-W4	STANDOFF, THREADED, INSULATED 1/4 X 3/8 LG	9008213		54
83	R11-26, R37-52, R61-76, R123-138, R158-173 R27, R81, R27	RES 100 1/4 W 5%	1300229		53
					52
					51
4		INSULATING FILM .245 x .650 x .002 THK	9005473		50
12		EYELET #GS4-7 E.B. STIMPSON	9006732		49
1		HANDLE	1210111		48
1/2		SPLIT LUGS	9006135		47
4		HEAT SINK	1202313		46
7	E41-E14, E18, E19, E28	IC 74H74	1905667		45
1	E8	IC 1074H04	19-10463	*	44
10	E3, E8, E23, E28, E31, E34 E37, E40, E43, E46	IC 8251-1	1908854		43
3	E2, E4, E27	IC 1074H00	19-10462	*	42
2	E22, E25	IC 74H18	1909057		41
20	T1-T28	TRANSFORMER	1509596		40
4	E9, E15, E16, E17	IC DEC 7380	1910390	*	39
20	E1, E5, E7, E10, E21, E24 E26, E29, E30, E32, E33 E35, E36, E38, E39, E41 E42, E44, E45, E47	IC 4011 QUAD TRANSISTOR	1511102	*	38
4	Q9, Q10, Q12, Q13	TRANSISTOR 2N3762	1508649		37
3	Q6, Q8, Q11	TRANSISTOR 2N4258	1505321		36
1	Q1	TRANSISTOR 6534 D	1503409		35
1	Q5	TRANSISTOR 3889 B	1503100		34
3	Q2, Q3, Q7	TRANSISTOR 1808	1502155		33
1	Q4	TRANSISTOR 2219	1501881		32
4	R85, R86, R103, R104	RES 16.9 6W 1%	1310032		31
1	R92	RES 1.78K 1.8W 1%	1302642		30
1	R91	RES 909 1.8W 1%	1302665	*	29
2	R89, R94	RES 147 1.8W 1%	1302874		28
2	R88, R105	RES 2K 1/4W 5%	1302387	*	27
2	R9, R10, R106, R141	RES 680 1/4 5%	1301424		26
1	R83	RES 750 1/4 5%	1301401		25
3	R38, R139, R140	RES 5Ω 1/4W 5%	1309422		24
1	R97	RES 15K 1/4W 5%	1300496		23
1	R174	RES 18K 1/4 5%	1300479		22
1	R95	RES 2.2K 1/4W 5%	1300417		21
4	R87, R88, R101, R102	RES 1.5K 1/4 5%	1300394		20
1	R79	RES 470 1/4W 10%	1300317		19
3	R84, R99, R102	RES 1 5K 1/4 5%	1300391		18
1	R93	RES 470 1/4 5%	1300315		17
A/R		WIRE JUMPER AWG #22, STRANDED (BLACK)	9107350		16
3	R18 R80 R98	RES 330 1/4 5%	1300295		15
41	R1-R8 823-R35 R53-R60 R96, R107-R114, R142-R149	RES 150 1/4 5%	1300250		14
A/R		WAKEFIELD THERMAL COMPOUND	9008268		13
1	D58	DIODE IN823 ZENOR	1105508		12
25	D17, D18, D55, D68, D81 D84-D87, D101-D116	DIODE D672	1105275		11
88	D1-D16, D19-D54, D56, D57, D62, D63, D68-D99	DIODE D664	1100114		10
6	C1-C5, C49	CAP 6.8 MFD 35V 20%	1000067		9
36	C6-C29, C46, C47, C48, C50, C53, C54, C74, C107, C108, C125, C126 C59	CAP 22uf 50V -20% 80%	1010274		8
80	C30-C45, C57, C58, C60-C73, C75-C106, C109-C124	CAP 1000PF 100V 5% DM	1000042		7
A/R		WIRE JUMPER AWG #22 SOLID	9107560-01		6
2	C51, C55	CAP 39PF 100V 5% DM	1000070		5
1		ETCHED CIRCUIT BOARD	5009708		4
REF		MODULE ECO HISTORY	8-MM-G231-06		3
REF		ASSY/DRILLING HOLE LAYOUT	E-AH-G231-05		2
REF		X-Y COORDINATE HOLE LOCATION	E-CO-G231-04		1
QTY.	REF DESIGNATION	DESCRIPTION	PART NO.		

PARTS LIST

IC TYPE	GND	+5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE		

IC PIN LOCATIONS

ITEM NO	AWG	FROM PT	TO PT
16		J6-A	J6-B
16		J5-A	J5-B
6		J4-A	J4-B
6		J3-A	J3-B
6		J2-A	J2-B
6		J1-A	J1-B

JUMPER LIST

2N4258	SAME			
G534D	NONE			
3889-B	2N 3646			
22-19	2N2219			
IN 823	NONE			
DG72	IN 3653	1008	NONE	
DG64	IN 3686	2N3762	SAME	
DEC NO.	EIA NO.	DEC NO.	EIA NO.	

SEMICONDUCTOR CONVERSION CHART

FIRST USED ON OPTION/MODEL: MM11-L

ETCH BOARD REV E

REV	DESCRIPTION	DATE	APPROVED
A	ORIGINATED	4/19/72	
B	G231-00001	5/17/72	
C	G231-00002	6/22/72	
D	G231-00003	8/24/72	
E	G231-00004&A	11/9/72	
F	G231-00005	2/26/73	

DRAWN P. DURANT 4/19/72
CHECKED [illegible] 11-21-72
PROJ. [illegible] 11/21/72
ENGR. [illegible] 11-21-72
NEXT HIGHER ASSY B-DD-MM11-L
SCALE 2/1
SHEET 1 OF 4

EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE: PDP-11 MEMORY DRIVER

DRAWING NO. E CS G23-0-
SIZE

107

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

BUS A10 L BN2 — E16 7380
BUS A11 L BN1 — E16 7380
BUS A09 L BM1 — E15 7380
BUS A08 L BM2 — E15 7380
BUS A07 L BL1 — E15 7380
BUS A03 L BJ1 — E17 7380
BUS A02 L BJ2 — E17 7380
CDL2 A01H — DA1

E9 7380 (4,5,3 / 6,7,2)
10K RI74 +5V
BUSA13 L BP1 — J3 / J4

MD2 A10H — E18 74H74
MD2 A11H — E18 74H74
MD2 A09H — E19 74H74
MD2 A09L
MD2 A08H — E20 74H74
MD2 A07H — E13 74H74
MD2 A03H — E13 74H74
MD2 A03L
MD2 A02H — E14 74H74
MD2 A01H — E11 74H74
DB1 — CDL2 CLKIH

BUSA06 L BL2 — E15 7380
BUS A12 L BP2 — E17 7380
BUS A05 L BK1 — E16 7380
BUSA04 L BK2 — E16 7380

MD2 A05H — E12 74H74
MD2 A04H — E12 74H74
E14 74H74
E19 74H74
E20 74H74

E9 7380 SPARE (9,10,14)
7380 SPARE E9 (12,11,13)
74H74 SPARE E11 (10,12,9,8,11,13)

WRITE H
CDL2 READ H CU2 — E6 1074H04
CDL2 TNAR H CV2 — TNAR H
E4 (4 CKTS.) 1074H00 — TWIDH — TSSH
T.P.3

E22 74H10 — MD2YS1L
E22 74H10 — MD2YS0L
E22 74H10 — MD2XS3L
E25 74H10 — MD2XS2L
E25 74H10 — MD2XS1L
E25 74H10 — MD2XS0L

	J3	J4
4K	IN	OUT
8K	OUT	IN

*** ALL INPUTS ARE FROM UNIBUS (BUS xxxL) OR G10Ø OR G11Ø (CDL2XXXL)

*** CDL2 TWID H CV1 — E2
CDL2 READ H CU2 — E2
CDL2 TNAR H CV2 — E2
WRITE H — E2
1074H00 (3 CKTS.) — T.P.2 — MD2 TDR H

+5V
D51 — Q1 G534 — 100Ω R77 — 330Ω R78 — 470Ω R79
330Ω R80
D52 D53 D54 D55 MD2SD — Q2 10Ø8 — STACK DISCHARGE
D56 D57
100Ω RB1 — Q3 10Ø8
C59 .22uF
196Ω 300Ω — EC1 EA1 — VREF
6.2V D58 — .22uF C48 — R90 147Ω — R94 147Ω — C49 6.8uF
C47 .22uF — R91 909Ω — J1 — R92 1.78K — J2 — R93 470Ω
Q4 2219 — R95 2.2K
-15V — X-Y REFFERENCE SUPPLY — C50 .22uF

TWID H — R96 150Ω — Q5 3Ø09B
R97 15K — R98 330Ω — Q6 4258 — R27 100Ω
R99 1.5K — R176 4.7K — Q7 10Ø8

CDL2 TWIDH CV1 — E6 1074H04
E6 1074H04 — T.P.
750Ω RB3 — 1.5K RB4 — Q8 4258 — C51 39 pF
470 pF C52 — RB5 16.9Ω — RB6 16.9Ω — Q9 Q10 3762 — T.P.4 — J5 — MD2IY CURRENT LOOP Y AXIS TO WRITE SWITCHES AND READ DRIVERS
RB7 1.5K — RB8 1.5K — RB9 1K — D60 D61 — -15V
.22 uF C54
D62 — .22 uF C53
D63 — C56 680 pF — 1.5K R100 — Q11 4258 — C55 39 pF — R101 1.5K — R102 1.5K
R103 16.9Ω — R104 16.9Ω — Q12 Q13 3762 — CURRENT LOOP J6 — MD2IX X AXIS TO WRITE SWITCHES AND READ DRIVERS
D64 — R105 1K — D65 — -15V
J7

T.P.1 — CDL2 READ H CU2 — E6 1074H04 — MD2 READ L

* THIS CIRCUIT IS ON STACK BOARD

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

FINISH —

DRN. F Carberry	DATE 9-24-71	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHKD. [illegible]	DATE 1-21-72	
ENG. P.D Durant	DATE 1-25-72	TITLE PDP-11 MEMORY DRIVER
PROJ. ENG. P. Durant	DATE 1-25-72	
PROD. R K Peterson	DATE 1-26-72	

NEXT HIGHER ASSY.

SCALE —

SHEET 2 OF 4

SIZE	CODE	NUMBER	REV
D	CS	G231-0-1	-

DIST

REVISIONS | REV | CHANGE NO | CHK

DEC FORM NO DRD 102-B

ECO No. G110-00018 Sheet 2 of 7

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL RESISTORS WILL BE 82 A ¼ W 5% AND ALL CAPACITORS WILL BE 120 PF 100V 5% DM
2. NOTE POLARITY OF 3.9UF CAPS.
3. THIS PRINT IS FOR C REV ETCH MODULES ONLY

NOTES:
4. ON SOME SYSTEMS SHIPPED, DL3 CAN ALSO BE 100NS DELAY LINE PART# 1609559.

5B REF
5 REF
A

DL1
DL3 B118
T10 T8 T6 T4 T9 T7 T5 T3
Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11 Q12 Q13 Q14 Q15 Q16
S1 S2 S3 S4 S5
E63 E60 E57 E54 E51 E48 E45 E42 E39 E62 E59 E56 E53 E50 E47 E44 E41 E38
E61 E58 E55 E52 E49 E46 E43 E40
E22 E11 E21 E10 E20 E9 E19 E8 E18 E7
E36 E28 E17 E6 E35 E27 E16 E5 E34 E26 E15 E4 E33 E25 E14 E3 E32 E24 E13 E2 E31 E23 E12 E1 E30 E29
C96 C95 C37

VUTSRPNMLKJHFEDCBA

VIEW A-A

+5V -5V -15V FA2 +5V

CAUTION
NON-STANDARD DRAWING
FOR SPECIAL APPLICATION

ALLOWABLE SUBSTITUTION LIST

ITEM	REF DESIGNATION	DESCRIPTION	PART NO.	STOCK
16	C49-C64	CAP. 3300PF. 50V ±8% CERAMIC	10110787	11
1	E6	IC DEC 3001-P	1909414	54

ITEM	REF DESIGNATION	DESCRIPTION	PART NO.	STOCK
N/A		#30 TWPAIR BLK&WHT	9107720-09	68
4		SCREW NYLON 2-56 x 3/16"	9000206	67
4	SI-S4	1/16W 7/16 L-#4-40 STANDOFF	9000206	66
N/A	ECCO BOND-26	USE AS NEEDED	N/A	65
16	R37-R52	RES. 2K 1/4W 5%	1302388	64
1	DL3	DELAY LINE L-00-01	1611327	63
2	R115, R118	RES. 220 1/4W 5%	1200271	62
N/A		WIRE JUMPER # 24 AWG STRD TINNED	1700020	61
29		SOLDER LUGS	9000132	60
1		HANDLE ASSY	1270711	59
1	E33	IC DEC 7404D	1905588	57
1	E27	IC DEC 7402B	1903097	58
1	E38	IC DEC 7475	1905058	56
1	E6	IC DEC 7406	1913136	54
1	E1	IC DEC 74H00	1909813	53
1	E28	IC DEC 7402	1905004	52
1	E30	IC DEC 74123	1912239	51
2	E18, E24	IC DEC 8242	1909742	50
9	E61, E47, E53, E58, E16 E36, E38	IC DEC 7420	1918001	49
8	E49, E43, E45, E48, E52, E55, E58, E61	IC DEC 7530	1918007	48
6	E35, E46, E56, E58, E62, E63	IC DEC 7404A	1905031	47
11	E39, E42, E45, E51, E54, E57 E60, E63, E8, E6 E48	IC DEC 7404	1905007	46
6	E19-E23 E5	IC DEC 74H01-1	1909847	45
10	E2 THRU 12 E29 E1 E30	IC DEC 7430	1903109	44
3	E17, E25, E31	IC DEC 7410	1905378	43
4	E4, E9, E13, E18	7 SEG DISPLAY (7447)	1609906	42
4	E9, E13, E17, E22	IC DEC 7447A	1605478-1	41
2	E2, E28	IC DEC 7476	1905047	40
1	DL1	DELAY LINE DL0100	1605323	39
1	R12	HEAT SINK DL3104	1605328	38
16	D1 THRU 16	1S16 2N3726	1510002	35
1	D25	1S16 DEC 30030	1503100	34
1	D19	1S16 2N3762	1500019	33
7	R100 THRU R112, R120	RES 5.76K 1/4W 1%	1300547	32
2	R105, R108	RES 100 1/4 5%	1300222	31
1	R103	RES 33K 1/4 5%	1300293	30
16	R55 THRU R70	RES 49.9 0.69 1%	1310032-0-5	29
32	R1 THRU R32	RES 75 1.00 1%	1303006	28
1	R109	RES 270 1/4 5%	1301977	27
1	R107	RES 560 1/4 5%	1301108	26
4	R54, R53, R113, R107	RES 464 1/4 1%	1303134	25
3	R121, R122, R115	RES 68 1/4 5%	1300205	24
3	R119, R104, R123	RES 330 1/4 5%	1300309	23
N/A	C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C79, C80, C81, C82, C83, C84, C85, C86, C87, C88, C89, C90, C91, C92, C93, C94, C95, C96, C97, C98, C99, C100, C101, C102, C103, C104, C105, C106, C107, C108, C109, C110, C111, C112, C113, C114, C115, C116, C117, C118, C119, C120, C121, C122, C123, C124, C125, C126, C127, C128, C129, C130, C131, C132, C133, C134, C135, C136, C137, C138, C139, C140, C141, C142, C143, C144, C145, C146, C147, C148, C149, C150, C151	CAP .01 UF 100V 20% DISC	10-01010	22
1	R117	RES 15K 1/4 5%	1300720	21
16	R53 THRU R68	RES 82 1/4 5%	1301781	20
4	R33, R37, R39, R82	RES 19.6 1/8W 1%	1303110	19
1	R110	RES 3.16K 1/8W 1%	1303067	18
1	R1.0	RES 5K TRIMPOT	1200345-09	17
1	D3	DIODE 1N3162	1105379	16
40	D1 THRU D32, D33 THRU D40,	DIODE 5082	1103278	15
12	D33 THRU D40	DIODE 0084	1100114	14
29	C30, C102 THRU C109, C120 THRU C125, C128, C129, C130, C131, C132, C133, C134, C135, C136, C137, C138, C139, C140, C141, C142, C143, C144, C145, C146, C147, C148, C149, C150, C151	CAP .01 UF 100V 20% DISC	10-01010	13
29	C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C79, C80, C81, C82, C83, C84, C85, C86, C87, C88, C89, C90, C91, C92, C93, C94, C95, C96, C97, C98, C99, C100, C101, C102, C103, C104, C105, C106, C107, C108, C109, C110, C111, C112, C113, C114, C115, C116, C117, C118, C119, C120, C121, C122, C123, C124, C125, C126, C127, C128, C129, C130, C131, C132, C133, C134, C135, C136, C137, C138, C139, C140, C141, C142, C143, C144, C145, C146, C147, C148, C149, C150, C151	CAP 22 UF 50V 20% CERAM	10-10276	12
16	C97 THRU C112	CAP .001 UF 100V 20% STAND	10-01167	11
8	C21, C23, C25, C30, C32, C39, C48, C49	CAP 120 PF 100V 5% DM	10-20010	9
8	C-89 THRU C96	CAP 470UF 20V 10%	10-00016	8
9	C144, C138, C149, C148, C85, C37, C28, C96, C152	CAP 4.7UF 35V 10% TANT	10-05070	7
17	C113 THRU C116	CAP 2200 100V 5% DM	10-00010	6
12		EYELET GS-6-7	9000730	5
REV		MODULE TOP HISTORY	0-111-0110-0-0	4
REV		MODULE WIRING NOTE (SHEET)	0-111-0110-0-0	3
REV		X-Y COORDINATE NOTE/LAYOUT	0-111-0110-0-0	2
REV		ETCHED CIRCUIT BOARD	9000108	1
QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM

ETCH BOARD REV C

EQUIPMENT CORPORATION.
CONTROL & DATA LOOPS (CDL1)
B 9S110-01

INTSIA2 SAME
DRAWN 10-24-73
CHECKED 11-3-73
DEC NO. FSD NO.

6-00-MMII-L

ECO No. G110-00018 Sheet 4 of 7

W3 2,4,5,6 PROGRAM MEMORY BANK LOCATION. CUT JUMPER FOR BUS A LINE LOW (ASSERTED) WHEN BANK SELECTED. W5 MUST BE IN WHEN USED AS 64 BANK.

MEMORY BANK SIZE

	W3	W5
48K	IN	OUT
64K	OUT	IN

DEVICE SELECT CIRCUIT (DSEN)

HIGH WHEN MEMORY BANK IS SELECTED

* USE INSULATED JUMPERS IN POSITIONS SHOWN BY DOTTED LINES WHEN INTERLEAVING

-5V SUPPLY

-5V TO SENSE AMPS

-15V

SPARES

BYTE MASKING LOGIC

PROTECT LOW

CAUTION
NON-STANDARD DRAWING
FOR SPECIAL APPLICATION

AR LATCH

CD LATCH

CI LATCH

TO DATA 7474 F.F.

TO BUS DRIVERS

TO SENSE AMPS (7518)

WRITE RESTART ONE SHOT CKT

DELAY FF RESET

MSEL RESET

NEXT USED ON OPTION/MODEL	MMII-L		
UNLESS OTHERWISE SPECIFIED DIMENSION IS IN INCHES TOLERANCES			
DECIMALS	ANGLES		
.XXX ± .005	±0° 30'		
.XX ± .02			
.X ± .1			
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓			
MATERIAL			
FINISH			

QTY	DESCRIPTION	PART NO	ITEM NO

PARTS LIST

DRWN J Carbone	DATE 1/6/72	DIGITAL EQUIPMENT CORPORATION	
CHKD P Galeyko	DATE 1-7-72		
ENG Diagram	DATE 12-7-72	TITLE CONTROL & DATA LOOPS (CDL2)	
PROJ ENG. Diagram	DATE 12/22/72		
PROG A Peterson	DATE 1-21-73		
NEXT HIGHER ASSY. G-00-MMII-L		SIZE/CODE DCS	NUMBER G110-0-1
SCALE		REV. E9	
SHEET 2 OF 5		DIST	

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

CDL2 -5V +5V

CDL2 LOAD ØH

CDL2 RESET ØL

-15V

+5V

SENSE TERMINATIONS

SENSE AMPS

INVERTER BUS RECS.

DATA LATCHES

BUS DRS

INH BASE DRIVERS

INHIBIT DRIVERS

SPARES

CDL2 STROBE Ø H

+5 REF

JUMPER

FA2

CDL2 DATA OUT H

CDL2 TINH Ø H

AM1 BUS PAL

NOTES:

1. ALL SIGNALS FROM UNIBUS (BUS DØ¢L TO BUS DØ7L), G110 SHEET 2 (CDL2) OR STACK (ØØBA,B TO Ø7BA,B AND ØØIN TO Ø7IN)
2. UNLESS SPECIFIED:
   ALL RESISTORS ARE 82Ω ½W 5%
   ALL CAPACITORS ARE 120 PF 100V 5%
   ALL TRANSFORMERS ARE 16-09478-01
   ALL DIODES ARE D672
   ALL TRANSISTORS ARE DEC-3734
3. ECO#2 DID THE FOLLOWING:
   C1-C8 CHANGED FROM 68 PF TO 39 PF
   R37-R44 CHANGED FROM 330Ω TO 2K
   C49-C56 CHANGED FROM .0022μf TO .005μf
4. ECO#8 DID THE FOLLOWING:
   R56, R58 CHANGED FROM 5.62K TO 4.99K
   C20, C22 CHANGED FROM .22μf TO 3.9μf
5. ECO#13 ADD JUMPER E35 P1 TO GND.

CAUTION
NON-STANDARD DRAWING
FOR SPECIAL APPLICATION

REVISIONS	REV	CHANGE NO

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO	ITEM NO.
MMII-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS .XXX = .005 .XX = .02 .X = .1 ANGLES 0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY

MATERIAL

FINISH

DSN	J. Graham	DATE 1/26/72
CHKD	R. Pulsifer	DATE 1/27/72
ENG	P. Quinn	DATE 1/31/72
PROJ ENG	P. Dickinson	DATE 2/7/72
PROD	K. Peterson	DATE 2/9/72

NEXT HIGHER ASSY. B-CD-MMII-L
SCALE
SHEET 3 OF 5

EQUIPMENT CORPORATION
TITLE
CONTROL & DATA LOOPS (CDL3)
SIZE D CODE DCS NUMBER G110-0-1 REV E9
DIST

The drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

CDL2 -5V
+5V
CDL2RESET 1L
CDL2LOADIN
-15V
+5V

Ø8SB D28 2K R46 T5 39 PF R16 75Ω C9
Ø8SA D9 R46 R16 75Ω C24
Ø9SB D12 2K R45 T5 39 PF R14 75Ω C23
Ø9SA D11 R45 R14 75Ω
13SB D24 2K R48 T5 39 PF R13 75Ω C11
13SA D23 R48 R13 75Ω
1ØSB D22 2K R47 T5 39 PF R12 75Ω C12
1ØSA D21 R47 R12 75Ω C34
14SB D28 2K R50 T5 39 PF R11 75Ω C13
14SA D27 R50 R11 75Ω
11SB D26 2K R49 T5 39 PF R10 75Ω C26
11SA D25 R49 R10 75Ω C25
15SB D32 2K R52 T5 39 PF R9 75Ω C36
15SA D31 R52 R9 75Ω
12SB D30 2K R51 T5 39 PF R8 75Ω C15
12SA D29 R51 R8 75Ω

E49 7528 E48 7528 E47 7528 E46 7528 E45 7528 E44 7528 E43 7528 E42 7528

E39 74H04 E38 74H04 E37 74H04 E36 74H04 E35 74H04 E34 74H04 E33 74H04 E32 74H04

R61 499Ω R62 .22 UF

SPARES
E44 74H04
E44 74H04
E30 74H04
E40 74H04

SENSE TERMINATIONS

E9 7350 E8 7350 E7 7350 E6 7350 E5 7350 E4 7350 E3 7350 E2 7350

E23 74H01-1 E22 74H01-1 E21 74H01-1 E20 74H01-1 E19 74H01-1 E18 74H01-1 E17 74H01-1 E16 74H01-1

E31 74H74 E30 74H74 E29 74H74 E28 74H74 E27 74H74 E26 74H74 E25 74H74 E24 74H74

SENSE AMPS

CDL2 STROBE 1 H
+SREF
JUMPER
E35 74H05
E59 74H74

INVERTERS BUS RECS DATA LATCH BUS DRS

Ø8IN DU1 R74 13.0Ω CS1 .005 UF Q9 T6 C25 100 PF R94 D45 D65
AH1 BUSØ8L DU2 R73 13.0Ω C58 .005 UF Q10 T6 C27 100 PF R93 D46 D66
9IN
AJ3 BUS10L DK2 R75 13.0Ω C56 .005 UF Q12 T6 C76 100 PF R92 D48 D64
13IN
AL2 BUS13L DR1 R76 13.0Ω C59 .005 UF Q11 T6 C28 100 PF R91 D49 D63
ØIN
AJ7 BUS14L DM2 R78 13.0Ω CG1 .005 UF Q13 T4 C79 100 PF R98 D50 D69
14IN
AL BUS11AL DM1 R77 13.0Ω CG2 .005 UF Q19 T4 C81 1000 PF R97 D70 D68
11IN
AK3 BUS15L DS2 R84 13.0Ω CG4 .005 UF Q10 T4 C82 1000 PF R96 D52 D68
15IN
AM2 BUS12L DS1 R85 13.0Ω CG3 .005 UF Q14 T4 C83 1000 PF R95 D51 D67
12IN

E41 7437 E40 7437 E41 7437 E41 7437 E41 7437 E41 7437 E41 7437 E41 7437

16-09996 D664

+5V

INH DRIVERS

E58 7437

AN2 BUS PB L

INH BASE DRIVERS

CDL2 DATA OUT H
CDL2 TUNI 1H

NOTES:

1. ALL SIGNALS FROM UNIBUS (BUS DOBL-DISL) G110 SHEET 2 (CDL2) OR STACK (Ø8SA,B TO 15SA,B AND Ø8IN TO 15IN.)
2. UNLESS SPECIFIED:
   ALL R'S ARE 1/4 W 5%
   ALL DIODES ARE D672
   ALL CAPACITORS ARE 100 PF 100V 5%
   ALL TRANSFORMERS ARE 16-09478-01
   ALL TRANSISTORS ARE 2N3734
3. ECO #2 DID THE FOLLOWING:
   C9-C16 CHANGED FROM 68 PF TO 39 PF.
   R45-R52 CHANGED FROM 3.3K TO 2K
   C57-C64 CHANGED FROM .0022 μF TO .005 μF
4. ECO #8 DID THE FOLLOWING:
   R60, R61 CHANGED FROM 5.62K TO 4.99K
   C24, C26 CHANGED FROM .22 μF TO 3.9 μF
5. ECO #13 ADD JUMPER E35P13 TO GND.

CAUTION
NON-STANDARD DRAWING
FOR SPECIAL APPLICATION

FIRST USED ON OPTION/MODEL: MAIN-L			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS IN INCHES; TOLERANCES: DECIMALS ANGLES; .XX ± .03; .XXX ± .010; ± 30'			
REMOVE BURRS AND BREAK SHARP; DRAWING STANDARD QUALITY			
MATERIAL			
FINISH			
DRAWN			
CHECKED			
ENGINEER			
MFG			
QA			
COMMENTS			

DIGITAL EQUIPMENT CORPORATION
CONTROL DATA 1604 (CDL 4)
SIZE C
DWG NO. 10-0119-0-1
REV E9
SHEET 5

THIS DRAWING AND SPECIFICATION, ... IS THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION ... SHALL NOT BE REPRODUCED OR COPIED ... OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS ... WITHOUT PERMISSION. COPYRIGHT ... DIGITAL EQUIPMENT CORPORATION

E.C.O. MODULE REFERENCE

ECO NO.		PRINT CHANGE LOCATION	MODULE STAMPED REVISION	CIRCUIT SCHEM REVISION	E.C.O. REQUIREMENTS 1	2	3	3A	4	5	6	7	8	9	9A	10	10A	11	12	13 13A	14 14A	15	15A	16	17	18
1	CHANGE R116, R118 FROM 1K TO 220Ω. CUT ETCH FROM E2-P3 TO E5-P4 & TO E15-P4. ADD JUMPERS FROM E2-P3 TO GND, FROM E5-P4 TO E15-P4, CUT ETCH FROM E2-P4 TO E2-P2, ADD JUMPER FROM E2-P4 TO DL2-P3, CUT ETCH FROM E26-P8 TO DL1-P10, ADD JUMPER FROM E26-P8 TO DL1-P9.			A	□																					
2	CHANGE SENSE TERM. CAPS. FROM 68 PF. TO 39 PF, C1-C6 (16 PARTS), CHANGE BALUN RES's., R37-R52, FROM 330Ω TO 2K (16 PARTS), CHANGE INH. BY PASS CAPS., C49-C64, FROM .0022 UF TO .005 UF. (16 PARTS) CHANGE DL3 FROM 50NS TO 100NS DELAY LINE CHANGE TERM. RES R115 FOR DL3 FROM 390Ω TO 3K	SHT 3&4 AREA [illegible] SHT 2 AREA [illegible] SHT 2 AREA [illegible]	B	B	□	□																				
3	DID NOT AFFECT 'C' REV ETCH MODULES		—	—	*	*	*																			
3A	DID NOT AFFECT "C" REV ETCH MODULES		—	—	*	*	*	*																		
4	DL3 NOT TERMINATED PROPERLY, CHANGE R115 FROM 3K TO 1K, CUT ETCH FROM DL3 OUT TO E16-P8, CUT ETCH FROM DL3 IN TO E2-P1, ADD JUMPER FROM DL3 IN TO E16-P8, ADD JUMPER FROM DL3 OUT TO E2-P1 GLUE DOWN DL2 WITH ECCO BOND	SHEET 2 AREA 4-C SHT 1 AREA 3-D	D	D	□	□	*	*	□																	
5	REVERSE C152, SO THAT + SIDE OF CAPACITOR GOES TO +5V INSTALL 4-1/2" OD X 3/8 LG. STAND-OFFS	SHT 1 AREA 4-E " 2-E	E	E	□	□	*	*	□	□																
6	DID NOT AFFECT C REV ETCH MODULES				*	*	*	*	*	*	*															
7	DRILL BLANK BOARD, AND INSTALL (4) STANDOFFS & SCREWS	SHT 1 AREA 2-F	E1	E1					□	□	*	□														
8	CHANGE R56, 58, 60, 61 FROM 5.62K TO 4.99K CHANGE C20, 22, 24, 26, 29, 31, 33, 35 FROM .22 UF TO 3.9 UF CHANGE C44-47 FROM .22 UF TO .01 UF	SHT 3&4 AREA 2-C SHT 1 AREA 5-C SHTS 3-4 AREA 2-C SHT 1 AREA 5-C	E2	E2		□						○	□													
9	INSTALL GND JUMPERS ON SIDE 1, CHANGE PART NO. OF #18 WIRE FROM 9107360-00 TO 1700029	SHEET 1	H	E3	□	□						○	□	□												
9A	RESTAMP HANDLE E-3, CHANGE PRINT FROM H TO E-3		E3	E3	□	□	*				*	○	□	□	□											
10	REMOVE E28, CUT ETCH FROM E28-P13 TO E28-P2 ADD E28 AND JUMPER E28-P13 TO E15-P10				□	□	*		○	*	○	□	*	*	□											
10A	RESTAMP HANDLE E-4, CHANGE PRINT REV FROM J TO E4				□	□	*	*	□	○	*	○	□	*	*	□	□									
11	CANCELED										—	—	—	—	—	—	—	—								
12	PRINT CHANGE ONLY			E5						○	*	○	□	*	*	□	*	—	□							
13 13A	ADD 2 JUMPERS SO THAT PAL AND PBL ARE HIGH ON THE BUS CHANGE EFFECTIVITY DATE		E6	E6	□		*	*	□	○	*	○	□	*	*	□	*	—	*	□						
14 14A	DID NOT EFFECT C REV ETCH MODULE				*	*			*	*	*	*	*	*	*	*	*	—	*	*	*					
15	GENERATE AN ALLOWABLE SUBSTITUTION LIST, CHANGE DL3.	SHEET 1 AREA 1-E	E7	E7	□	□	*	*	□	○	*	○	□	*	*	□	*	—	*	□	*	□				
15A	DELETE 68Ω RES FROM ALLOWABLE SUBSTITUTION LIST.	SHEET 1 AREA 1+2-H	E7	E7	□	□	*	*	□	○	*	○	□	*	*	□	*	—	*	□	*	□	□			
16	3 ETCH CUTS, 2 JUMPERS TO E7 PINS 6 & 7	SHT [illegible]	E8	E8	□	□	*	*	□	○	*	○	□	*	*	□	□	—	□	□	*	*	*	□		
17	DID NOT AFFECT C REV ETCH MODULES				*	*	*	*	*	*	*	*	*	*	*	*	*	—	*	*	*	*	*	*	*	
18	1 ETCH CUT, REMOVE 1 JUMPER INSTA[illegible] FOR STROBE O H		E9	E9	□	□	*	*	□	○	*	○	□	*	*	□	□	—	□	□	*	*	*	□	*	□

NOTES:

1. THIS PRINT IS FOR "C" REV. ETCH MODULES ONLY.
2. THIS CHART IS DESIGNED TO ALLOW THIS G110 CIRCUIT SCHEMATIC TO BE USED WITH ALL PREVIOUS REVISION MODULES
3. CHART IS USED AS FOLLOWS:
   - A. LOCATE REVISION LETTER STAMPED ON HANDLE
   - B. FOLLOW THE MODULE STAMPED COLUMN TO FIND APPROPRIATE REVISION
   - C. NOTICE SYMBOLS TO RIGHT OF REVISION LETTER, THESE SYMBOLS WILL INDICATE ECO REQUIREMENTS FOR THAT MODULE.
4. SYMBOLS:
   - □ = REQUIRED BUT REFER TO EFFECTIVITY DATE
   - Δ = ONE OR THE OTHER IS REQUIRED
   - ○ = ONE OR THE OTHER IS REQUIRED BUT (C162 MUST BE CHANGED)
   - * = NOT REQUIRED

REVISIONS: REV | CHANGE NO | CHK

— CAUTION —
NON-STANDARD DRAWING
FOR SPECIAL APPLICATION

FIRST USED ON OPTION/MODEL: MMII-L	QTY.	DESCRIPTION	PART NO. / ITEM NO.
		PARTS LIST	
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES: DECIMALS .XXX = .005, .XX = .02, .X = .1; ANGLES ±0° 30'. REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √	DRN. L.G.	DATE 4-22-76	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
	CHK'D.	DATE	
	ENG.	DATE	TITLE: CONTROL & DATA LOOPS (CDLS)
	PROJ. ENG.	DATE	
	PROD.	DATE	
MATERIAL: —	NEXT HIGHER ASSY.	B-DD-MMII-L	SIZE D / CODE CS / NUMBER G110-0-0 / REV. E9
FINISH: —	SCALE NONE	SHEET 5 OF 5	DIST.

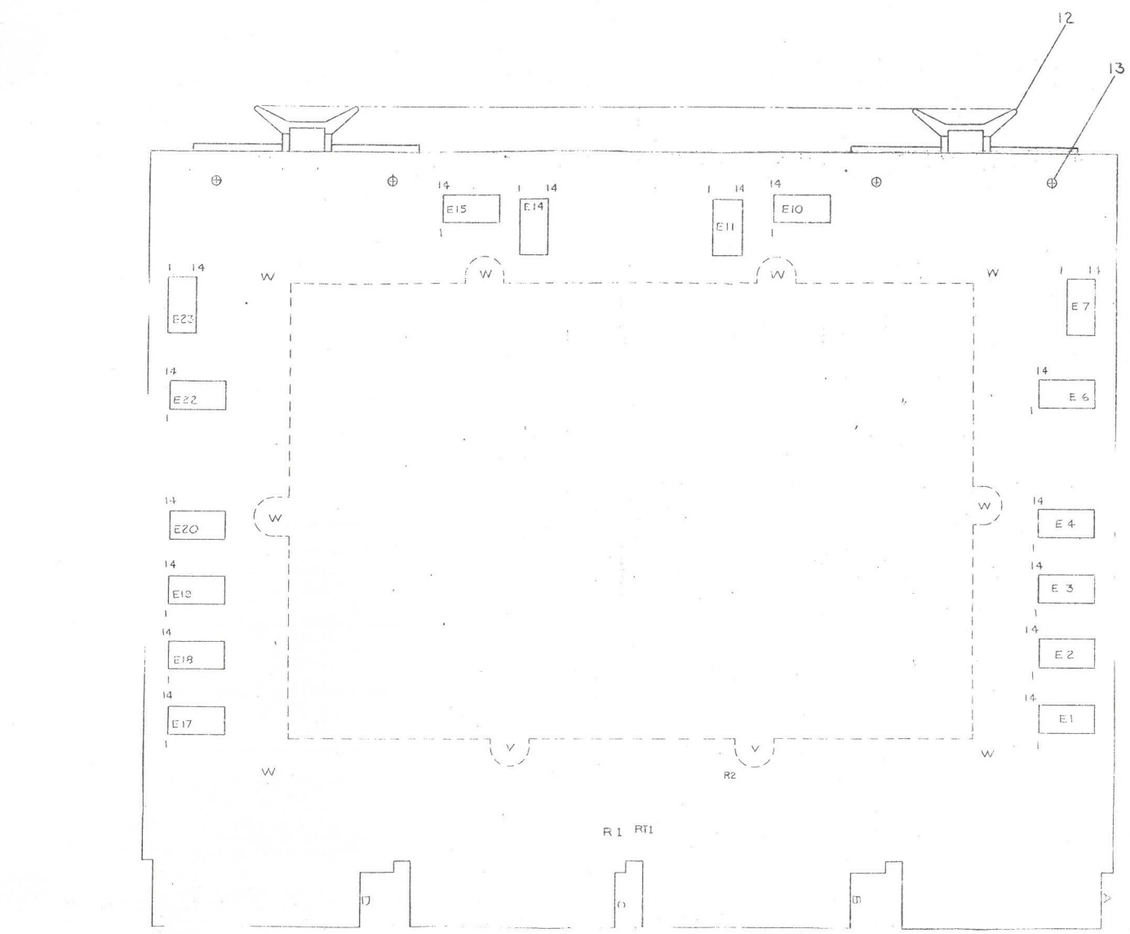
DEC FORM NO. [illegible]

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

NOTES:
1. ALL COMPONENT LEADS TO BE LESS THAN 1/16 INCHES LONG ON SIDE TWO OF MODULE.

* COMPONENT SUBSTITUTION LIST

MODULE	ORIGINAL PART DESCRIPTION	ORIGINAL PART PART NO.	SUBSTITUTE PART DESCRIPTION	SUBSTITUTE PART PART NO.	ITEM NO.
H213	2501-00 I.C. DIODE	1910010-00	2501-01 I.C. DIODE	1910010-01	2
H213	2501-00 I.C. DIODE	1910010-00	2501-05 I.C. DIODE	1910010-05	2



LEGEND	
MODULE CONN.	BACK PANEL LOCATION
A	C
B	D
C	E
D	F

QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
1	RT1			16
1	R2			15
1	R1			14
8			3006732	13
4		HANDLE	3008337-04	12
1		STICKER, ECO PART # P.O. NO.	VENDOR SUPP.	11
2		JUMPER		10
16		MOS-CORE MATS (STRUNG)		9
4		WASHER #10 (.134 I.D.) (6-40 HOLE)		8
10		SCREW #6-32 x .625 FILLISTER HEAD		7
10		SCREW #6-32 x .375 FILLISTER HEAD		6
10		STANDOFF, THREADED 6-32 x .625		5
1		SUBSTRATE		4
1		COVER, I.C. TYPE	VENDOR SUPP.	3
16	E1-E4, E6, E7, E10-E15, E17-E20, E22, E23	I.C. DIODE, 2501	1910010	2
1		PLANAR ASSY	5009713	1

IC TYPE	GND	+5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY. EXCEPTIONS ARE STATED ABOVE		

IC PIN LOCATIONS

ITEM NO	AWG	FROM PT	TO PT

JUMPER LIST

REV	DESCRIPTION	DATE	APPROVED
A	ORIGINATED	6/10/72	R.DURANT
B	H213-0000-1	7-10-72	R.DURANT
C	H213-0000-2	9-8-72	R.DURANT
D	H213-0000-3	6/10/73	R.DURANT
E	H213-0000-4	6/14/73	R.DURANT

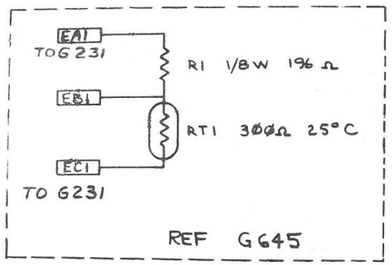
DEC NO.	ECA NO.	DEC NO.	ECA NO.

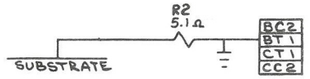
SEMICONDUCTOR REVISION CHART

DIGITAL EQUIPMENT CORP. MAYNARD, MASS.
MM11-L
STD1 BOARD REV

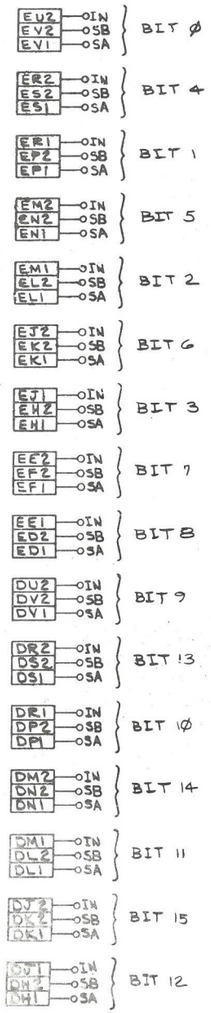
DIGITAL EQUIPMENT CORPORATION
STACK SCHEMATIC (8K + 5 BIT)
SIZE F
H213
SHEET 1 OF 1

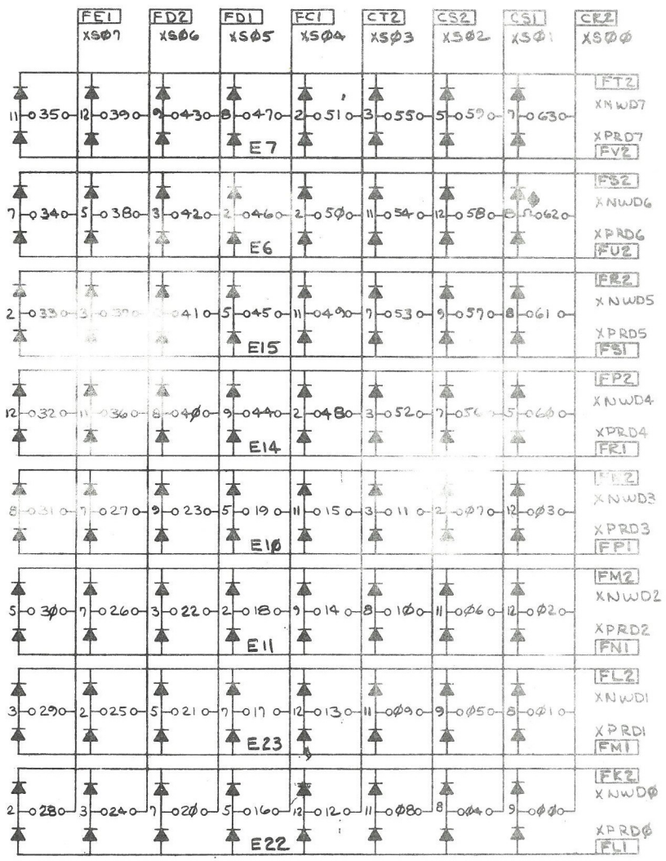
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

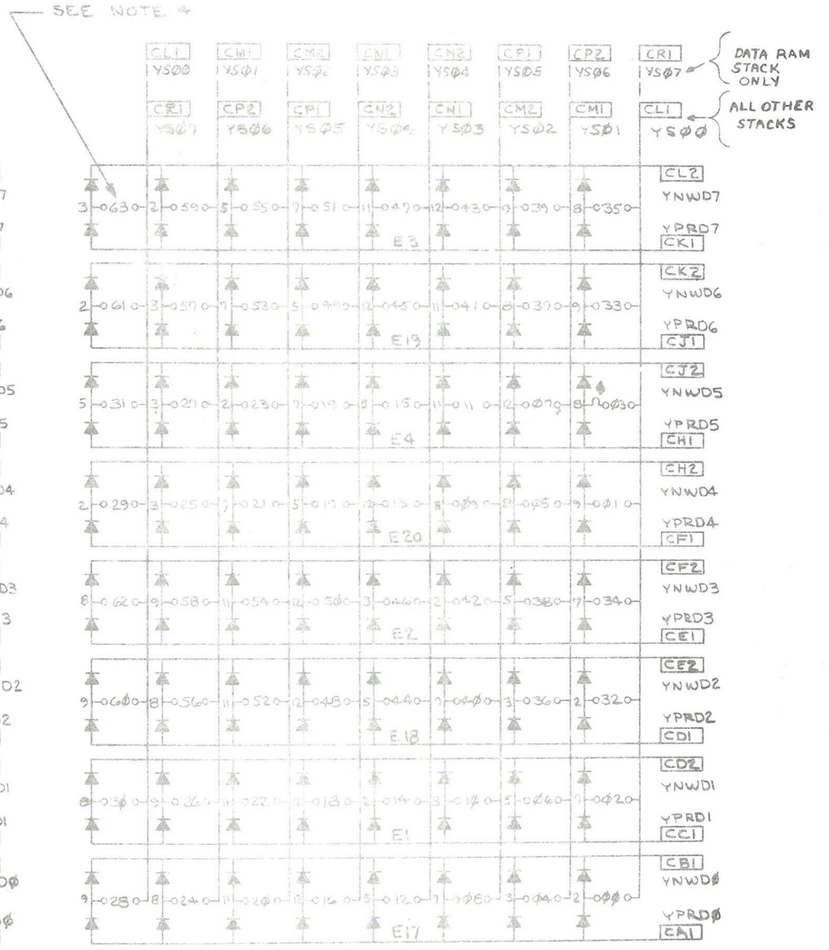




NOTES
1. UNLESS OTHERWISE SPECIFIED: IC'S ARE TO BE DEC PART # 1910010
2. INDICATES STACK LINE NUMBER. (TYP)
3. INDICATES CURRENT LOOP.
4. INDICATES MAGNET WIRE TERMINATION (SOLDERED TO P.C. PAD).


EU2 EV2 EV1 OIN OSB OSA BIT Ø
ER2 ES2 ES1 OIN OSB OSA BIT 4
ER1 EP2 EP1 OIN OSB OSA BIT 1
EM2 EN2 EN1 OIN OSB OSA BIT 5
EM1 EL2 EL1 OIN OSB OSA BIT 2
EJ2 EK2 EK1 OIN OSB OSA BIT 6
EJ1 EH2 EH1 OIN OSB OSA BIT 3
EE2 EF2 EF1 OIN OSB OSA BIT 7
EE1 ED2 ED1 OIN OSB OSA BIT 8
DU2 DV2 DV1 OIN OSB OSA BIT 9
DR2 DS2 DS1 OIN OSB OSA BIT 13
DR1 DP2 DP1 OIN OSB OSA BIT 10
DM2 DN2 DN1 OIN OSB OSA BIT 14
DM1 DL2 DL1 OIN OSB OSA BIT 11
DJ2 DK2 DK1 OIN OSB OSA BIT 15
DJ1 DH2 DH1 OIN OSB OSA BIT 12





REVISIONS

REV	CHANGE NO	CHK

FIRST USED ON	QTY	DESCRIPTION	PART NO.	ITEM NO.
MMII-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES: DECIMALS ±.XX = ±.03, ±.XXX = ±.010, ANGLES ±0° 30'. MACHINED SURFACES TO BE 125 MICRO-INCHES. FRACTIONS ±1/64. MATERIAL: —. FINISH: —.

	NAME	DATE
DRAWN	[illegible]	1-25-72
CHECKED	[illegible]	1-25-72
ENGR	[illegible]	DATE
MFG	[illegible]	DATE

NEXT ASSEMBLY: B-00-MMII-L-Ø

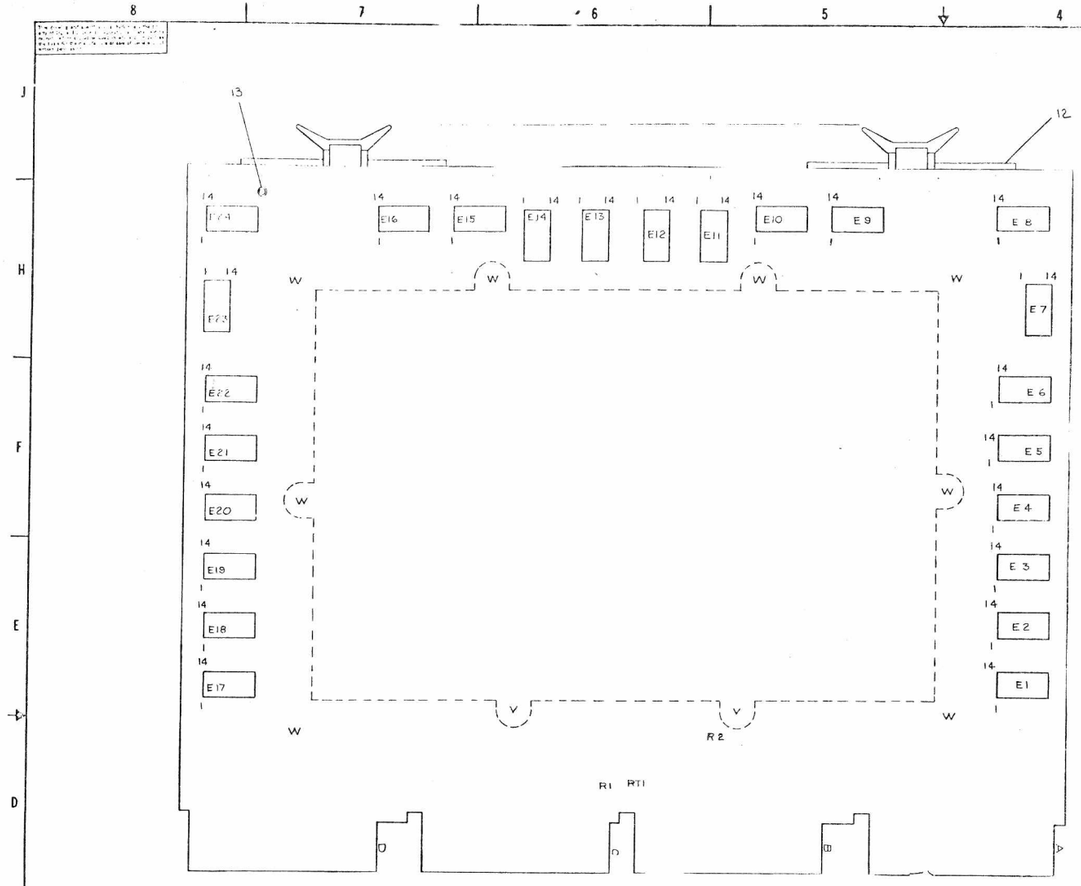
EQUIPMENT CORPORATION

TITLE: STACK SCHEMATIC 4K X 16 BIT

SIZE D | CODE | NUMBER DCS H213-Ø-1 | REV E

SHEET

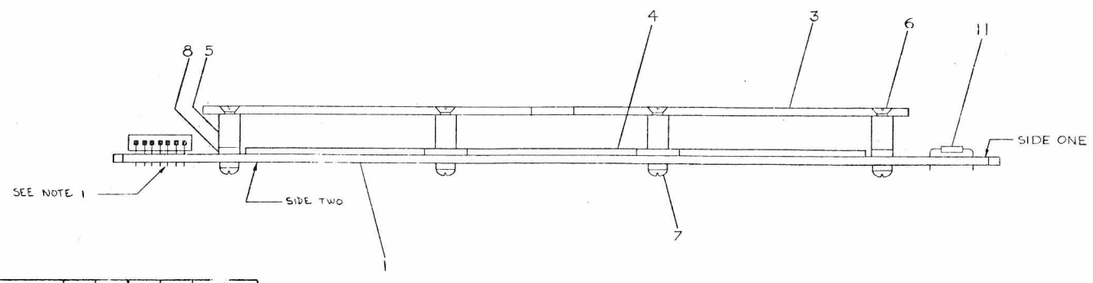
SIZE D | CODE | NUMBER DCS H213-Ø-1 | REV E



NOTES:
1. ALL COMPONENT LEADS TO BE LESS THAN 1/16 INCHES LONG ON SIDE TWO OF MODULE

MODULE	COMPONENT DESIGNATION		SOCKET DESIGNATION	
	SINGLE PART		SOCKET ASSY	
	DESCRIPTION	PART NO.	DESCRIPTION	PART NO.
H214	250Ω-00 - BLACK	9170/6-00	-01	9170/9-01
H214	250Ω-00 - BLACK	9170/6-00	-02	9170/9-02
H214	250Ω-00 - BLACK	9170/6-00	-03	9170/9-03

LEGEND	
MODULE CONN.	BACK PANEL LOCATION
A	C
B	D
C	E
D	F



H216	H215	H214	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
1	1	1	RT1	THERMISTOR 300 Ω 2%	1309785	16
1	1	1	R2	RESISTOR 5.1 Ω 1/4W 5%	1309422	15
1	1	1	R1	RESISTOR 196 Ω 1/8W 1%	1302956	14
8	8	8		EYELET	8006732	13
4	4	4		HANDEL, GREEN	8008337-0-1	12
2	2	2		JUMPER,	VENDOR SUPP	11
1	1	1		STICKER WITH DEC PART & PD NO		10
18	18	6		8132-CORE MATS (STRUNG)		9
4	4	4		WASHER, NYLON 5/32 X 1/4 (#40 HOLE)		8
10	10	10		SCREW, NYLON FILLISTER #4-40 X 7/16 LG		7
10	10	10		SCREW, FLAT HEAD NYLON #4-40 X 5/16		6
10	10	10		STANDOFF HEADED #4-40 X 1/4 W X 7/16 LG		5
1	1	1		SUBSTRATE		4
1	1	1		COVER PLATE	VENDOR SUP	3
24	24	24	E1 THRU E24	I.C. DIODE ESD1	19-10010	2
1	1	1		PLANER MEMORY BOARD	5009713	1
QTY	QTY	QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

IC TYPE	GND	+5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED AT USE		

K PIN LOCATIONS

FILM NO.	AWG	FROM PT	TO PT

JUMPER WIRE LIST

MV11-L

ETCH BOARD REV

DEC NO.	EIA NO.	DEC NO	EIA NO.

SEMICONDUCTOR CONVERSION CHART

DRWD DATE
CHKD DATE
ENG DATE
M.E. DATE
QA DATE

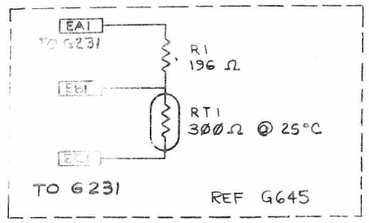
DIGITAL EQUIPMENT CORPORATION

TITLE STACK SCHEMATIC (H214 8K X 16BIT) (H215 4K X 18BIT) (H216 2K X 19BIT)

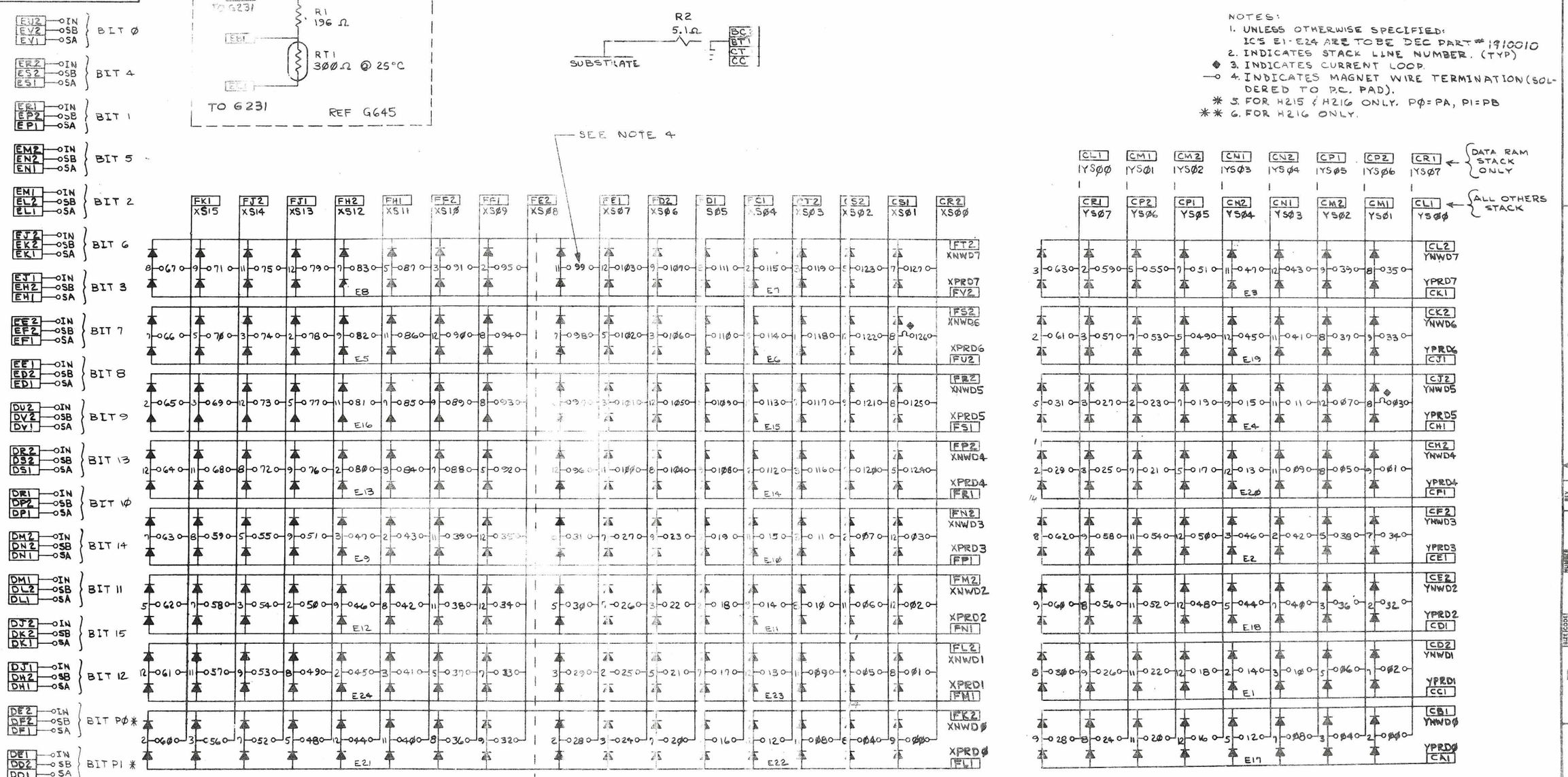
SIZE H214 Ø REV E

SHEET 1 OF 2

The drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



NOTES:
1. UNLESS OTHERWISE SPECIFIED: IC'S E1-E24 ARE TO BE DEC PART # 1910010
2. INDICATES STACK LINE NUMBER. (TYP)
◆ 3. INDICATES CURRENT LOOP.
—o 4. INDICATES MAGNET WIRE TERMINATION (SOLDERED TO P.C. PAD).
* 5. FOR H215 & H216 ONLY. PØ = PA, P1 = PB
** 6. FOR H216 ONLY.



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM SEQ.
MMI1-L		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES: DECIMALS .XXX = .005, .XX = .02, .X = .1; ANGLES ±0° 30'. REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓

MATERIAL —

FINISH —

		DATE
DRWN	T. Carbonneau	11/23/71
CHK'D	L. Kelleigh	1-25-72
ENGR	P.D. Durant	1/25/72
ENGR'L ENGR	P.D. Durant	1/25/72
PROG	R.K. Peterson	1-26-72

digital EQUIPMENT CORPORATION

TITLE: STACK SCHEMATIC (H214-8K X 16 BIT) (H215-8K X 18 BIT) (H216-8K X 19 BIT)

NEXT HIGHER ASSY. B-DD-MMI1-L-Ø

SIZE/CODE D CS | NUMBER H214-Ø-1 | REV. E

SCALE — SHEET 2 OF 2 | DIST.

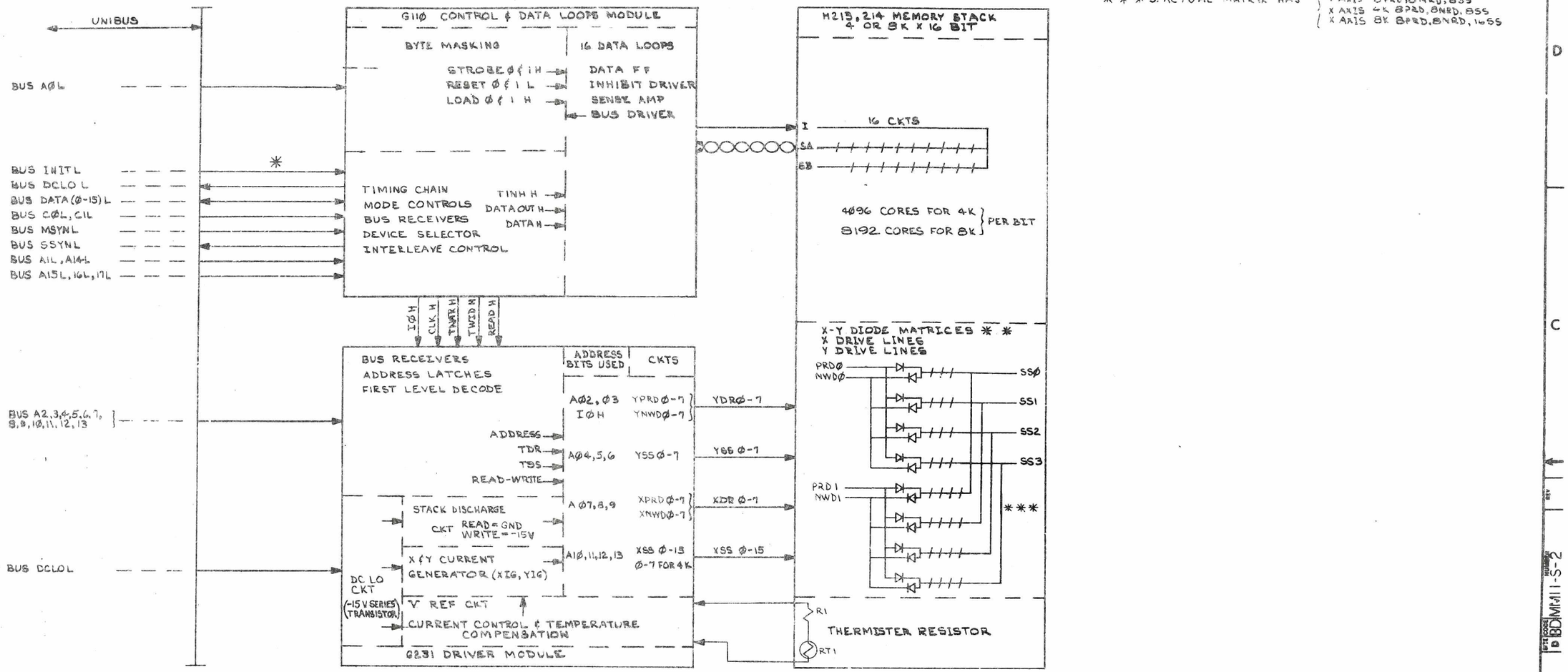
REVISIONS: REV | CHANGE NO | CHK

DRAWING 45-0423 1980

DEC FORM NO DSD 103-B

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

NOTES:
* 1. ALL ARROWS SHOW SIGNAL FLOW DIRECTION.
** 2. MATRIX SHOWN IS FOR ILLUSTRATION ONLY.
*** 3. ACTUAL MATRIX HAS { Y AXIS 8 PRD, 8 NRD, 8SS / X AXIS 4K 8 PRD, 8 NRD, 8SS / X AXIS 8K 8 PRD, 8 NRD, 16SS



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
MMII-S		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1 — ANGLES: ±0° 20'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN	F Carberry	DATE 1/19/72
CHK'D	F Baleigh	DATE 2-16-72
ENG	P Durant	DATE 3-29-72
PROJ. ENG.	P Durant	DATE 3-31-72
PROD.	Jack Forman	DATE 16-2-72

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: BLOCK DIAGRAM

NEXT HIGHER ASSY.: B-DD-MMII-S
SCALE
SHEET 1 OF 2
SIZE D | CODE BD | NUMBER MMII-S-2 | REV.
DIST.

REVISIONS: REV. | CHANGE NO. | CHK

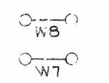
DEC FORM NO 5103 MR-9

...ing and specifications hereon are the prop... of Digital Equipment Corporation and shall not be ...duced or copied or used in whole or in parts for ... the manufacture or sale of items without ... permission.

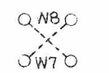
MEMORY BANK	MACHINE ADDRESS	W1 ✳	W5 A13 △	W6 □ A14 OR A01	W4 A15	W3 A16	W2 A17L	△ W9 4K 8K	W10
0-4K	000000-017776	IN	IN	IN	IN	IN	IN		
4-8K	020000-037776		OUT	IN	IN	IN	IN		
8-12K	040000-057776		IN	OUT	IN	IN	IN		
12-16K	060000-077776		OUT	OUT	IN	IN	IN		
16-20K	100000-117776		IN	IN	OUT	IN	IN		
20-24K	120000-137776		OUT	IN	OUT	IN	IN		
24-28K	140000-157776		IN	OUT	OUT	IN	IN		
28-32K	160000-177776		OUT	OUT	OUT	IN	IN		
32-36K	200000-217776		IN	IN	IN	OUT	IN		
36-40K	220000-237776		OUT	IN	IN	OUT	IN		
40-44K	240000-257776		IN	OUT	IN	OUT	IN		
44-48K	260000-277776		OUT	OUT	IN	OUT	IN		
48-52K	300000-317776		IN	IN	OUT	OUT	IN		
52-56K	320000-337776		OUT	IN	OUT	OUT	IN		
56-60K	340000-357776	IN	IN	OUT	OUT	OUT	IN		
60-64K	360000-377776		OUT	OUT	OUT	OUT	IN		
64-68K	400000-417776		IN	IN	IN	IN	OUT		
68-72K	420000-437776		OUT	IN	IN	IN	OUT		
72-76K	440000-457776		IN	OUT	IN	IN	OUT		
76-80K	460000-477776		OUT	OUT	IN	IN	OUT		
80-84K	500000-517776		IN	IN	OUT	IN	OUT		
84-88K	520000-537776		OUT	IN	OUT	IN	OUT		
88-92K	540000-557776		IN	OUT	OUT	IN	OUT		
92-96K	560000-577776		OUT	OUT	OUT	IN	OUT		
96-100K	600000-617776		IN	IN	IN	OUT	OUT		
100-104K	620000-637776		OUT	IN	IN	OUT	OUT		
104-108K	640000-657776		IN	OUT	IN	OUT	OUT		
108-112K	660000-677776		OUT	OUT	IN	OUT	OUT		
112-116K	700000-717776		IN	IN	OUT	OUT	OUT		
116-120K	720000-737776		OUT	IN	OUT	OUT	OUT		
120-124K	740000-757776		IN	OUT	OUT	OUT	OUT		
DEVICE USED AS 4K MEMORY △		IN	X	X	X	X	X	IN	OUT

W7-8 INTER LEAVE □

WHEN USED AS A 4K OR A NON INTER-LEAVED 8K JUMPERS ARE



WHEN USED AS AN 8K INTERLEAVED (2-8K BANKS REQUIRED) JUMPERS ARE



W11 PROTECT

WHEN W11 IS INSTALLED IT MAKES THE MEMORY DO A DATI RE-GARDLESS OF THE STATE OF THE C00 AND C01 LINES

NOTES:

✳1 W1 IS FOR TEST PURPOSES ONLY

△2 WHEN USED AS AN 8K BANK W5 AND W10 MUST BE INSTALLED AND W9 MUST BE OUT
WHEN USED AS A 4K BANK W10 MUST BE OUT W9 MUST BE IN AND W5 DETERMINES THE BANKS LOCATION ON THE BUS

□3 THIS MEMORY CAN ONLY BE INTERLEAVED AS 16K (TWO ADJACENT CONTIGUOUS ADDRESS 8K BANKS) WHEN NOT INTER-LEAVED (SOLID JUMPERS ON W7 AND W8) THE DEVICE SELECT IS AS SHOWN IN TABLE 1 USING A 8. WHEN TWO OF BANKS ARE INTER-LEAVED W7 AND W8 MUST BE AS SHOWN IN DOTTED LINES IN TABLE 1 ALSO IN TABLE 1 A01 NOW GOES TO THE DEVICE SELECTOR GATE CONTROLLED BY W6 THE TWO BANKS MUST HAVE W6 IN ON ONE BANK AND OUT ON THE OTHER

4 FIGURE 1 SHOWS THE PHYSICAL LOCATION OF THE JUMPERS ON THE G110 IF THE MODULE WERE LYING ON THE PRINT WITH COMPONENTS UP AND CONNECTORS TOWARD BOTTOM OF PRINT W7 & W8 ARE AS SHOWN SCHEMATICALLY ON E CS G110 0 1

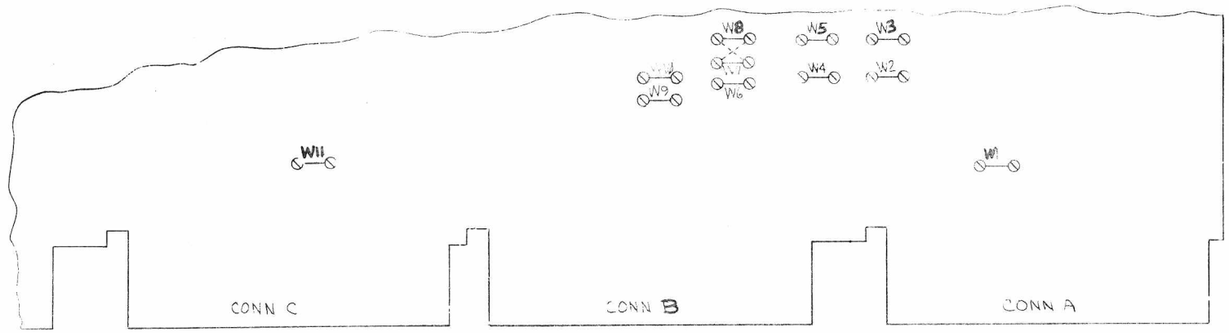


FIGURE 1
G110 JUMPER PHYSICAL LOCATION
SEE NOTE 4

REVISIONS	REV
CHANGE NO	
CHK	

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO	ITEM NO
MM11-S		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: XXX ± .005, .XX ± .02, .X ± .1 — ANGLES: ±0°30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL
FINISH

DRN.	DATE	7/15/72
CHK'D.	DATE	5-25-72
ENG.	DATE	7-12-72
PROJ. ENG.	DATE	7-12-72
PROD.	DATE	
NEXT HIGHER ASSY.	B-DD-MM11-S-0	
SCALE		
SHEET 2 OF 2		

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: BLOCK DIAGRAM (DEVICE DECODING)

SIZE	CODE	NUMBER	REV
D	BD	MM11 S 2	

DIST.

D BD MM11-S-2

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

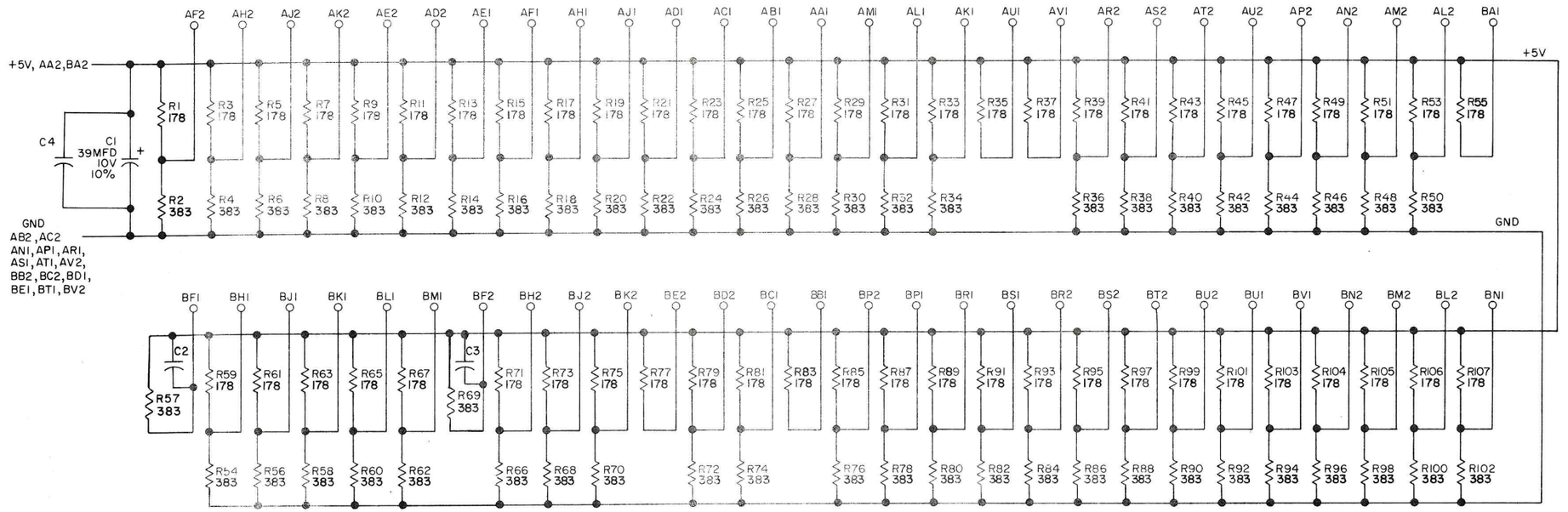
MADE BY F. CARBERRY	CHECKED J. Kelleigher	SECTION
DATE 1/5/72	DATE 1-25-72	
ENG P. Durant	PROD R.K. Patterson	ISSUED SECT.
DATE 1/25/72	DATE 1-26-72	

ITEM NO.	DWG NO./PART NO.	DESCRIPTION	QUANTITY/VARIATION MM11-L	MM11-K
1	B-DD-H213-Ø	H213 MEMORY STACK (4K X 16)		1
2	E-CS-G231-Ø-1	MEMORY DRIVER	1	1
3	E-CS-G11Ø-Ø-1	CONTROL & DATA LOOPS	1	1
4	A-DD-H214-Ø	H214 MEMORY STACK (8K X16)	1	

TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO.
MEMORY, MM11	11	A	PL	MM11-L-Ø		
	SHEET 1 OF 1	DIST.				

DEC FORM DEC 16-(325)-1031-N870
DRA 110

THIS SCHEMATIC IS FURNISHED ONLY FOR TEST AND MAINTENANCE PURPOSES. THE CIRCUITS ARE PROPRIETARY IN NATURE AND SHOULD BE TREATED ACCORDINGLY.
COPYRIGHT 1969 BY DIGITAL EQUIPMENT CORPORATION



UNLESS OTHERWISE INDICATED:
RESISTORS ARE 1/4W, 1%
CAPACITORS ARE .001UF, 250V, 20%

REVISIONS			
CHK	CHG NO.	REV	
[illegible]	00001	A	
[illegible]	00002	B	
[illegible]	00003	C	D. J. Indile 5-29-73 P. JANSON

DRN. BUTLER	DATE 11-21-69	
CHK'D	DATE	
ENG. [illegible]	DATE	
PROD.	DATE	

TRANSISTOR & DIODE CONVERSION CHART

DEC	EIA	DEC	EIA

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: BUS TERMINATOR M930

SIZE	CODE	NUMBER	REV.
C	CS	M930-0-1	C

PRINTED CIRCUIT REV. C

SIZE	CODE	NUMBER	REV.
C	CS	M930-0-1	C

DEC FORM NO.
DRC 102

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

DRAWING DIRECTORY

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © , DIGITAL EQUIPMENT CORPORATION"

CUSTOMER PRINT SET INDEX

THIS IS PRINT SET

SEQUENCE		SEQUENCE	
CONSOLE ASSY			
CONSOLE ASSY (PL)			
JUMPER POWER			
I/O CABLE	D-UA-KY11-J-Ø		
CIRCUIT SCHEMATIC	A-PL-KY11-J-Ø		
ETCH BOARD ASSY	B-IA-7409730-0-0		
	C-UA-BCØ8R-Ø3-Ø		
	D-CS-5409766-Ø-1		
	E-IA-5409766-0-0		

UNIT VARIATIONS

VAR	TITLE	PRINT SET KY11-J
KY11-JA	CONSOLE ASSY 11/Ø5	X
KY11-JB	CONSOLE ASSY 11/1Ø	X
KY11-JC	CONSOLE ASSY GT4Ø	X
KY11-JF	CONSOLE ASSY UNICHANNEL 15	X
KY11-JD	CONSOLE ASSY 11/Ø5 (10.5)	X
KY11-JE	CONSOLE ASSY 11/1Ø (10.5)	X

scanned by Steve Malikoff steven@malikoff.com March 2023

REVISIONS | REV | CHG. NO. | DATE

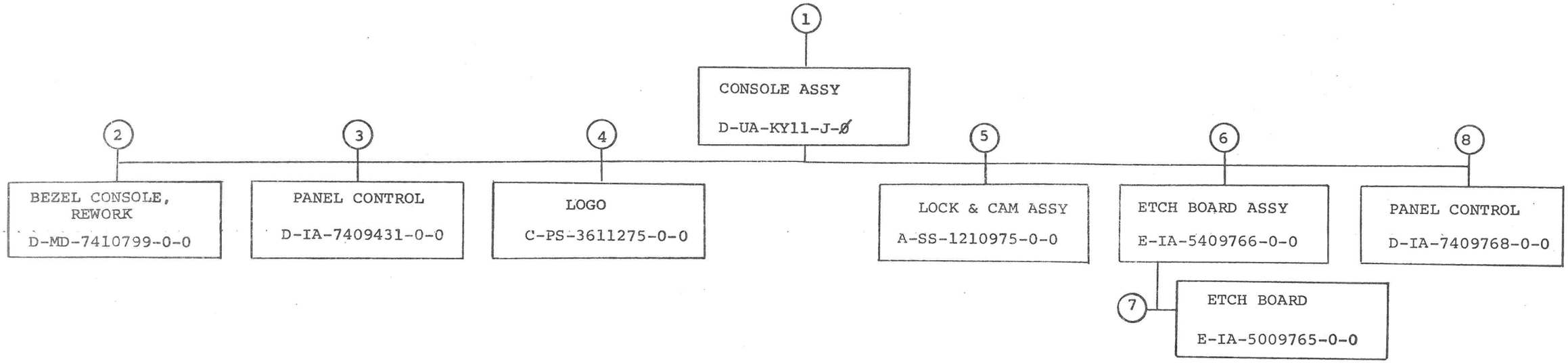
USED ON OPTION/MODEL: 11/Ø5

SHEET 1 OF 3

DRN. J.CAHILL	DATE 4-23-3	TITLE: CONSOLE ASSY
CHK'D. J.CAHILL	DATE 4-23-3	
PROJ ENG.	DATE 8-29-73	
PROD.	DATE 8-29-73	SIZE B; CODE DD; NUMBER KY11-J; REV
FIELD SERV.	DATE 9-26-73	DIST

DRB 106

DEC 16-(325)-1062-1A-R972



TITLE		SIZE	CODE	NUMBER	REV
CONSOLE ASSY	SHEET 2 OF 3	B	DD	KY11-J	

scanned by Steve Malikoff steven@malikoff.com March 2023

ELECTRICAL

CUSTOMER PRINT SET KY11-J	MFG. SET	FIND NO.	DRAWING NO	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
X		1	D-UA-KY11-J-Ø	#	1	CONSOLE ASSY	
X			A-PL-KY11-J-Ø	#	2	CONSOLE ASSY (PL)	
X			B-IA-7409730-0-0	#	1	JUMPER POWER	
X			C-UA-BCØ8R-Ø3-Ø	#	1	I/O CABLE	
X		6	E-IA-5409766-0-0	#	1	ETCH BOARD ASSY	
X			D-CS-5409766-Ø-1	#	1	CIRCUIT SCHEMATIC	
			B-MH-5409766-Ø-6		1	MODULE ECO HISTORY	
		7	E-IA-5009765-0-0		1	ETCH BOARD	

MECHANICAL

CUSTOMER PRINT SET KY11-J	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		1	D-UA-KY11-J-Ø		1	CONSOLE ASSY	
			A-PL-KY11-J-Ø		2	CONSOLE ASSY (PL)	
			C-MD-7409534-0-0		1	ACTUATOR (REWORK)	
			B-IA-7409444-0-0		1	DETENT	
			C-UA-BCØ8R-Ø3-Ø		1	I/O CABLE	
			B-MD-7409867-0-0		1	EXTENDED LEAF REWORK (ACTUATOR)	
			B-MD-7409868-0-0		1	SWITCH ADAPTER PLATE	
		2	D-MD-7410799-0-0		1	BEZEL CONSOLE REWORK	
			J-PS-1210922-0-0		1	BEZEL CONSOLE CASTING	
		3	D-IA-7409431-0-0		1	PANEL CONTROL	
			C-SS-7409431-0-1		1	SILK SCREEN (MAGENTA)	
			C-SS-7409431-0-2		1	SILK SCREEN (BLK) REAR	
			C-SS-7409431-0-3		1	SILK SCREEN (11Ø5) VERMILLION	
		4	C-PS-3611275-0-0		1	LOGO	
			A-SS-3611275-0-1		1	SILK SCREEN	
			A-SS-3611275-0-2		1	SILK SCREEN	
			A-SS-3611275-0-3		1	SILK SCREEN	
			A-SS-3611275-0-4		1	SILK SCREEN	
			A-SS-3611275-0-5		1	SILK SCREEN	
		5	A-PS-1210975-0-0		1	LOCK & CAM ASSY	
		6	E-IA-5409766-0-0		1	ETCH BOARD ASSY	
		7	E-IA-5009765-0-0		1	ETCH BOARD	
		8	D-IA-7409768-0-0		1	PANEL CONTROL	
			C-SS-7409768-0-1		1	SILK SCREEN	
			C-SS-7409768-0-2		1	SILK SCREEN	
			C-SS-7409768-0-3		1	SILK SCREEN	

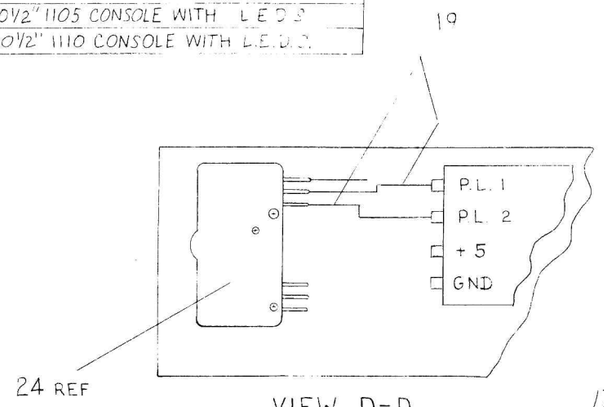
CUSTOMER PRINT SET CODES

X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

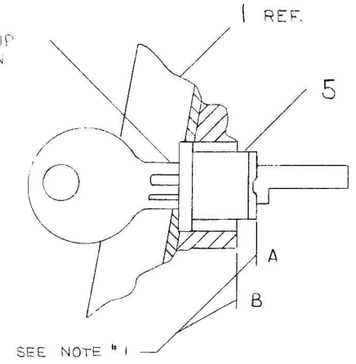
TITLE	SHEET	SIZE	CODE	NUMBER	REV
CONSOLE ASSY	3 OF 3	B	DD	KY11-J	

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission. 1972

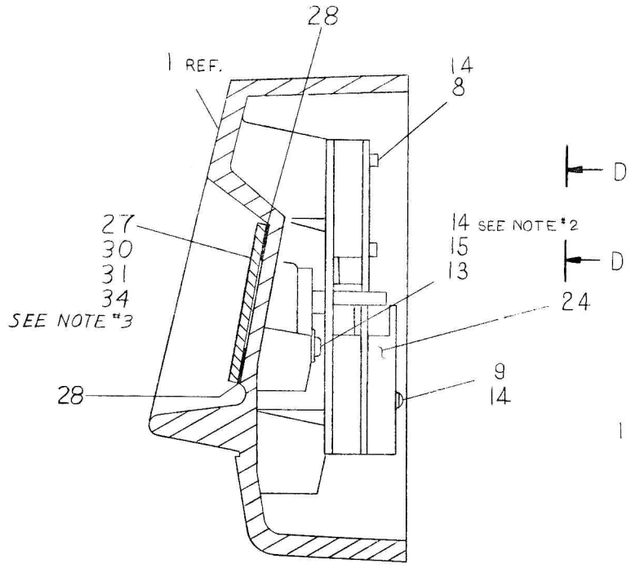
LEGEND	
PART NO.	VARIATION
KY11-JA	1105 CONSOLE WITH L.E.D.S.
KY11-JB	1110 CONSOLE WITH L.E.D.S.
KY11-JC	VT40 CONSOLE WITH L.E.D.S.
KY11-JF	UC15 CONSOLE WITH L.E.D.S.
KY11-JD	10½" 1105 CONSOLE WITH L.E.D.S.
KY11-JE	10½" 1110 CONSOLE WITH L.E.D.S.



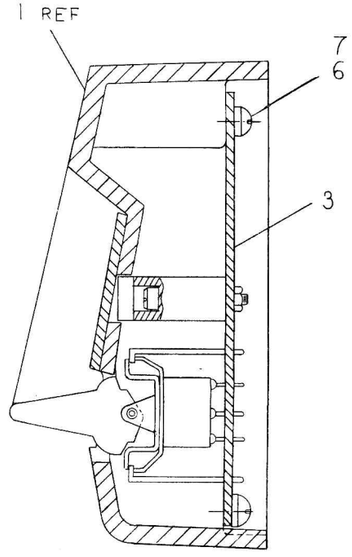
VIEW D-D
SCALE: NONE



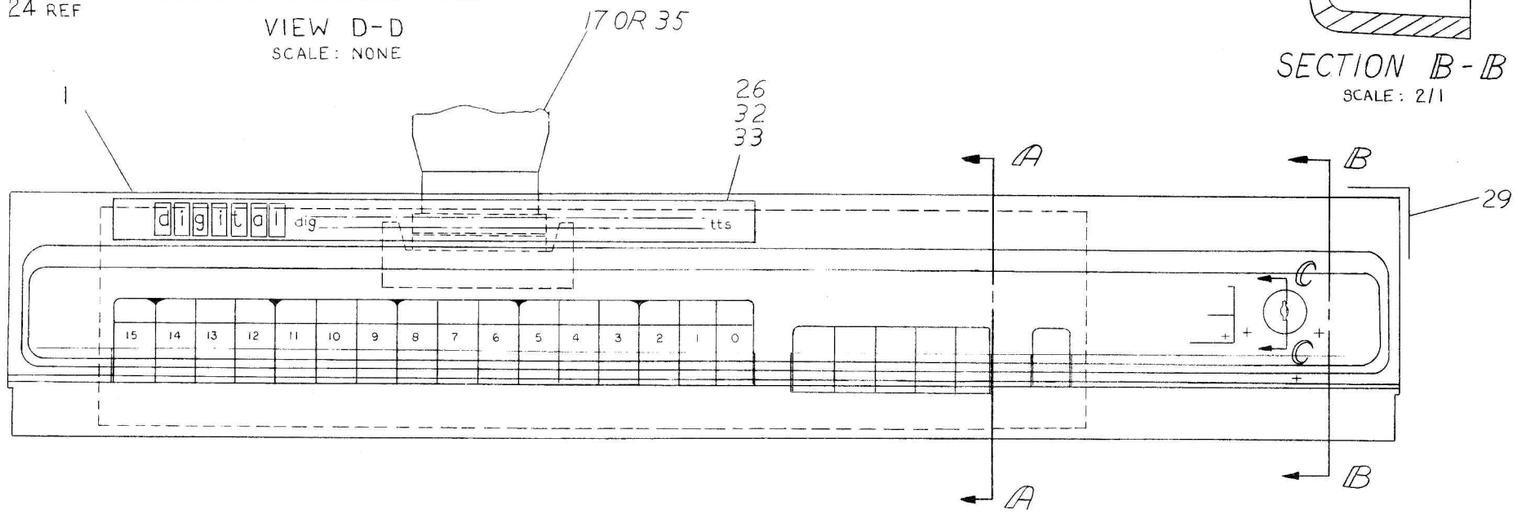
SECTION C-C
SCALE: 2/1



SECTION B-B
SCALE: 2/1



SECTION A-A
SCALE: 2/1



NOTES:
1. CASTING KEY HOLE SURFACES A & B TO BE COATED WITH LUBE (ITEM # 18)
2. LOCK WASHER IS NOT USED ON SCREW UNDER SWITCH.
3. INSERT CONTROL PANEL (ITEM "27,30,31 OR 34) USING ADHESIVE TRANSFER TAPE (ITEM "28) ON REAR SURFACE & PRESS FIRMLY IN PLACE.

REVISIONS				
CHK	CHANGE NO	REV		
GC	KY11-00001	D	G. GRAHAM	11-28-72
	REVISED & REDRAWN			
GC	11/05-00040	E	M TITELBAUM	
	DWG NO WAS KY11-0-0			
PM	KY11J-00001	F	G. GRAHAM	2-9-73
GC	KY11J-00001	H	G. GRAHAM	2-12-73
	R-NDA			

QTY.	DESCRIPTION	PART NO.	ITEM NO.
	PARTS LIST		

FIRST USED ON OPTION/MODEL: PDP 1105

DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY √
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

DRN	CAHILL	DATE 11-16-71
CHK'D	TESCHNER	DATE 4-14-72
ENG	GRAHAM	DATE 4-5-72
PROJ. ENG.	WEEKS	DATE 5-5-72
PROD.	PETERSON	DATE 5-10-72

NEXT HIGHER ASSY: D-U-1105-0-0

SCALE: 1:1

SHEET 1 OF 3

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CONSOLE ASSY (PDP 11/05)

SIZE	CODE	NUMBER	REV
D	UA	KY11J-0	H

DIST

DEC FORM NO. ORD 100

REV H
NUMBER KY11-J-0
SIZE CODE D UA

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY	R. ROBICHAUD	CHECKED	C. TESCHNER	SECTION	
DATE	12-8-71	DATE	5-1-72		1
ENG	G. Graham	PROD	R. K. PETERSON	ISSUED SECT.	
DATE	4-5-72	DATE	5-10-72		1

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY / VARIATION KY11-JA	KY11-JB	KY11-JC	KY11-JF	KY11-JD	KY11-JE
1	D-MD-7410799-0-0	CONSOLE BEZEL REWORK	1	1	1	1	1	1
~~2~~	~~E-IA-7409374-3-0~~	~~BEZEL CONSOLE (11/1Ø)~~	~~X~~	~~1~~	~~X~~	~~X~~		
3	E-IA-5409766-0-0	CONSOLE ETCH BOARD ASSY	1	1	1	1	1	1
~~4~~	~~E-IA-5409766-2-0~~	~~CONSOLE ETCH BOARD ASSY (OPOCA)~~	~~X~~	~~X~~	~~1~~			
5	A-PS-1210975-0-0	LOCK & CAM ASS'Y	1	1	1	1	1	1
6	9006020-1	SCR, PHL PAN HD. #6-32 X 1/4 LG	6	6	6	6	6	6
7	9006633	WASH T TOOTH LOC	6	6	6	6	6	6
8	9006003-1	SCR AN HD 2-56 X 3/8	2	2	2	2	2	2
9	9008025-1	SCR AN HD LG	2	2	2	2	2	
10	~~1210790-0-0~~	~~SWIT DPST N.O~~	~~1~~	~~1~~	~~1~~			
11	~~C-MD-7409534-0-0~~	~~ACTU OR RE-WORK~~	~~1~~	~~1~~	~~1~~			
12	~~1210905-1~~	~~INSULATOR~~	~~2~~	~~2~~	~~2~~			
13	B-IA-7409444-0-0	DETENT	1	1	1	1	1	1
14	9006686	WASH #2 SPLIT L K	5	5	5	6	5	5
15	9006000-4	SCR BINDER HD -56 X3/16 LG	2	2	2	2	2	2
16	~~1210904-1~~	~~SWITCH TMD-5201 LD CONTACT-291-5201-00~~	~~1~~	~~1~~	~~1~~			
17	C-UA-BC08R-Ø3	I/O CABLE (3' LG)	1	1	1	1	X	X
18	4901077	LUBE (FOR CAM LOCK)	A/R	A/R	A/R	A/R		
19	B-IA-7409730-0-0	JUMPE POWER	2	2	2	2	2	2
20	~~B-MD-7409868-0-0~~	~~SWITCH ADAPTER PLATE~~	~~1~~	~~1~~	~~1~~			
21	~~B-MD-7409867-0-0~~	~~EXTEN ER LEAF REWORK (ACTUATOR)~~	~~1~~	~~1~~	~~1~~			
22	~~9008449-2~~	~~SCR PHL FLAT HD #2-56 X 1/4 LG.~~	~~2~~	~~2~~	~~2~~			

TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO
CONSOLE ASSY (PDP11/05)	D-UA-KY11-J-Ø	A	PL	KY11-J-Ø	H	KY11J-00002
	SHEET 1 OF 2	DIST.	G			

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

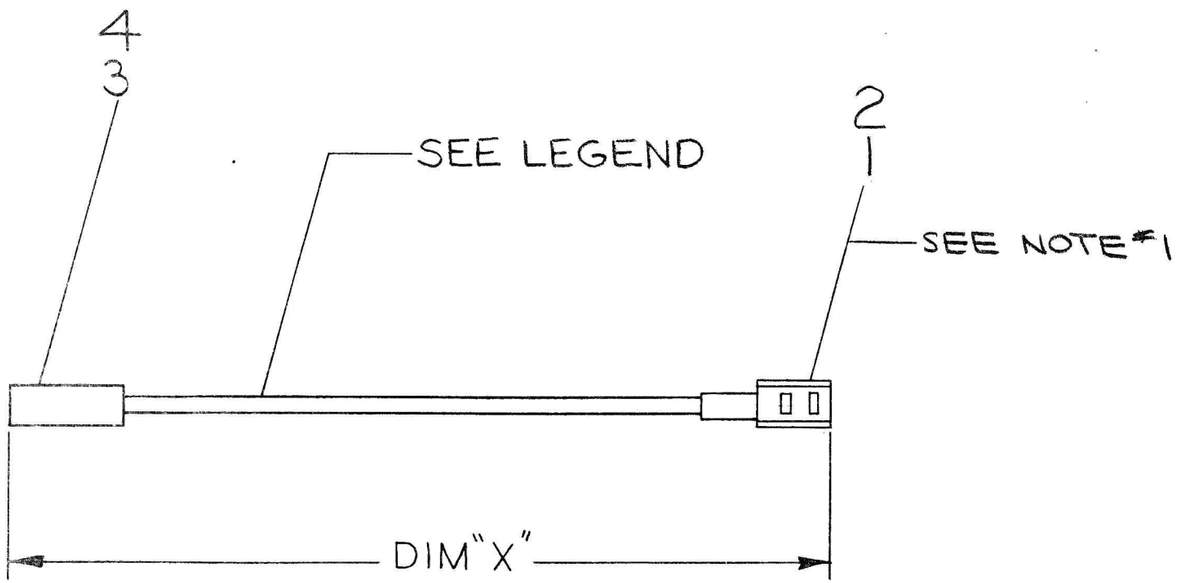
MADE BY	R. ROBICHAUD	CHECKED	C. TESCHNER	SECTION	
DATE	12-8-71	DATE	5-1-72		1
ENG	G. GRAHAM	PROD	R. K. PETERSON	ISSUED SECT.	
DATE	4-5-72	DATE	5-10-72		1

ITEM NO	DWG NO. / PART NO.	DESCRIPTION	QUANTITY / VARIATION KY11-JA	KY11-JB	KY11-JC	KY11-JF	KY11-JD	KY11-JE
23	~~E-IA-7409374-4-0~~	~~BEZEL CONSOLE (VT4Ø)~~	~~X~~	~~X~~	~~1~~	~~X~~		
24	A-PS-1210982-0-0	KEY LOCK SWITCH	1	1	1	1	1	1
25	~~E-IA-7409374-5-0~~	~~BEZEL CONSOLE (UC15)~~	~~X~~	~~X~~	~~X~~	~~1~~		
26	C-PS-3611275-0-0	LOGO (PDP-1105) NOTE VARIATIONS	1	1	X	X	1	1
27	D-IA-7409431-1-0	PANEL CONTROL (1105)	1	X	X	X	1	X
28	9009210-1	ADHESIVE TRANSFER TAPE ½ WIDE	A/R	A/R	A/R	A/R	A/R	A/R
29	1211052	CONSOLE PROTECTIVE COVER	1	1	1	1	1	1
30	D-IA-7409431-3-0	PANEL CONTROL (1110)	X	1	X	X	X	1
31	D-IA-7409768-0-0	PANEL CONTROL (GT40)	X	X	1	X	X	X
32	C-PS-3611275-4-0	LOGO (DEC GRAPHIC)	X	X	1	X	X	X
33	C-PS-3611275-5-0	LOGO (UC15)	X	X	X	1	X	X
34	D-IA-7409431-4-0	PANEL CONTROL (UC15)	X	X	X	1	X	X
35	C-UA-BC08R-64	IØ CABLE (4'-0"LG)	X	X	X	X	1	1

TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO
CONSOLE ASSY (PDP11/05)	D-UA-KY11-J-Ø	A	PL	KY11-J-Ø	H	
	SHEET 2 OF 2	DIST.	G			

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

LEGEND			
NUMBER	DIM"X"	COLOR	ITEM
7409730-01	5 1/2"	BLACK	5



NOTES:
1. ITEM #2 (SHRINK TUBING) TO COVER CONTACT AREA OF ITEM #1 (SOLDERLESS CONN.)

QTY.	DESCRIPTION	PART NO.	ITEM NO.
A/R	WIRE, #18 AWG, BLK	9107278-00	5
1	MINI FASTAB #60291-1	1210820-2	4
1	HOUSING, 1-480417-C	1210820-1	3
1	TUBING, SHRINK (WHITE)	9107252	2
1	SOLDERLESS CONN.-50902	9007917	1

PARTS LIST

FIRST USED ON OPTION MODEL: PDP-1105

REVISIONS		
REV.	CHANGE NO.	CHK

DRN. C B McCoy	DATE 4-11-72	
CHK'D. C. Teschner	DATE 4-19-72	
ENG. J. Graham	DATE 4-19-72	
PROJ. ENG. B D Wicks	DATE 4-26-72	
PROD. R K. Peterson	DATE 4/27/72	
NEXT HIGHER ASSEMBLY — / —		
SCALE NONE		
SHEET 1 OF 1		

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE: JUMPER, POWER

SIZE	CODE	NUMBER	REV
B	IA	7409730-0-0	

DIST.

C FORM NO
B 109

...ATIONS HEREIN, ARE THE ... EQUIPMENT CORPORATION AND ... REPRODUCED OR COPIED OR USED IN WHOLE ... THE MANUFACTURE OR SALE ... PERMISSION. ... DIGITAL EQUIPMENT CORPORATION"

WIRE TABLE

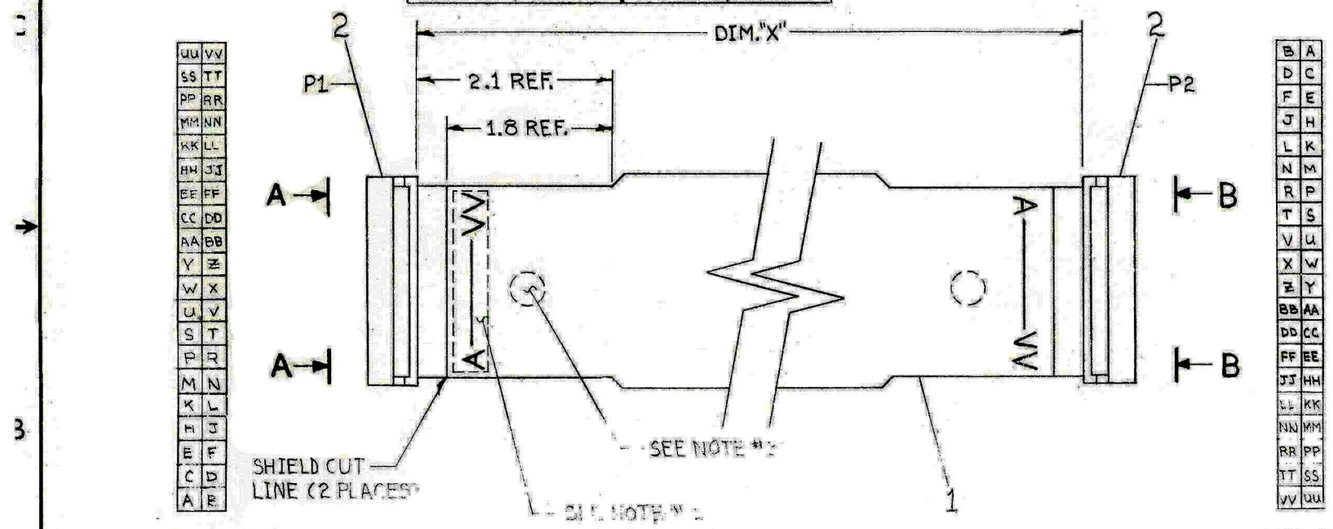
FROM	TO	FROM	TO
P1-A	P2-VV	P1-Y	P2-X
P1-B	P2-UU	P1-Z	P2-W
P1-C	P2-TT	P1-AA	P2-V
P1-D	P2-SS	P1-BB	P2-U
P1-E	P2-RR	P1-CC	P2-T
P1-F	P2-PP	P1-DD	P2-S
P1-H	P2-NN	P1-EE	P2-R
P1-J	P2-MM	P1-FF	P2-P
P1-K	P2-LL	P1-HH	P2-N
P1-L	P2-KK	P1-JJ	P2-M
P1-M	P2-JJ	P1-KK	P2-L
P1-N	P2-HH	P1-LL	P2-K
P1-P	P2-FF	P1-MM	P2-J
P1-R	P2-EE	P1-NN	P2-H
P1-S	P2-DD	P1-PP	P2-F
P1-T	P2-CC	P1-RR	P2-E
P1-U	P2-BB	P1-SS	P2-D
P1-V	P2-AA	P1-TT	P2-C
P1-W	P2-Z	P1-UU	P2-B
P1-X	P2-Y	P1-VV	P2-A

LEGEND

NUMBER	DIM"X"	PRECUT LENGTH
BCØ8R-Ø1	1FT	1FT 1.5IN ±1IN
BCØ8R-Ø2	2FT	2FT 1.5IN ±1IN
BCØ8R-Ø3	3FT	3FT 1.5IN ±1IN
BCØ8R-Ø4	4FT	4FT 1.5IN ±1IN
BCØ8R-Ø6	6FT	6FT 1.5IN ±2IN
BCØ8R-Ø8	8FT	8FT 1.5IN ±2IN
BCØ8R-1Ø	1ØFT	1ØFT 1.5 IN ±2IN
BCØ8R-12	12FT	12FT 1.5 IN ±3IN
BCØ8R-2Ø	2ØFT	2ØFT 1.5IN ±3IN
BCØ8R-25	25FT	25FT 1.5IN ±3IN
BCØ8R-3Ø	3ØFT	3ØFT 1.5IN ±.6FT
BCØ8R-5Ø	5ØFT	5ØFT 1.5IN ±1FT
BCØ8R-6Ø	6ØFT	6ØFT 1.5IN ±1.2FT
BCØ8R-75	75FT	75FT 1.5IN ±1.5FT
BCØ8R-AØ	1ØØFT	1ØØFT 1.5IN ±2FT
BCØ8R-A3	13ØFT	13ØFT 1.5IN ±2.6FT
BCØ8R-A6	16ØFT	16ØFT 1.5IN ±3.2FT

NOTES:

1. ASSEMBLE THIS CABLE TO PROCESS SPEC #7606198-0-0.
2. COLOR CODE OR LEGEND IDENTIFICATION TO BE PLACED ON SHIELD SIDE OF CABLE IN THIS AREA AS SHOWN.
3. INSPECTION & TEST STAMPS TO BE PLACED AT EACH END OF THE CABLE ASSEMBLY.



VIEW A-A
CONN. LEGEND REF

VIEW B-B
CONN. LEGEND REF

ITEM NO.	QTY.	DESCRIPTION	PART NO.
		PARTS LIST	
2	2	CONNECTOR, 40 SOCKET	
	A/R	[illegible]	

FIRST USED ON OPTION/MODEL

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: .xxx = .005, .xx = .02, .x = .1
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √
MATERIAL
FINISH

DRN.	D.FONTAINE	DATE 8-28-70
CHK'D.	J.FLEMING	DATE 8-26-70
ENG.	P.GARDNER	DATE 9-3-70
PROJ. ENG.	P.GARDNER	DATE 9-3-70
PROD.	DONALD	DATE 9-4-70

NEXT HIGHER ASSY.
SCALE NONE
SHEET

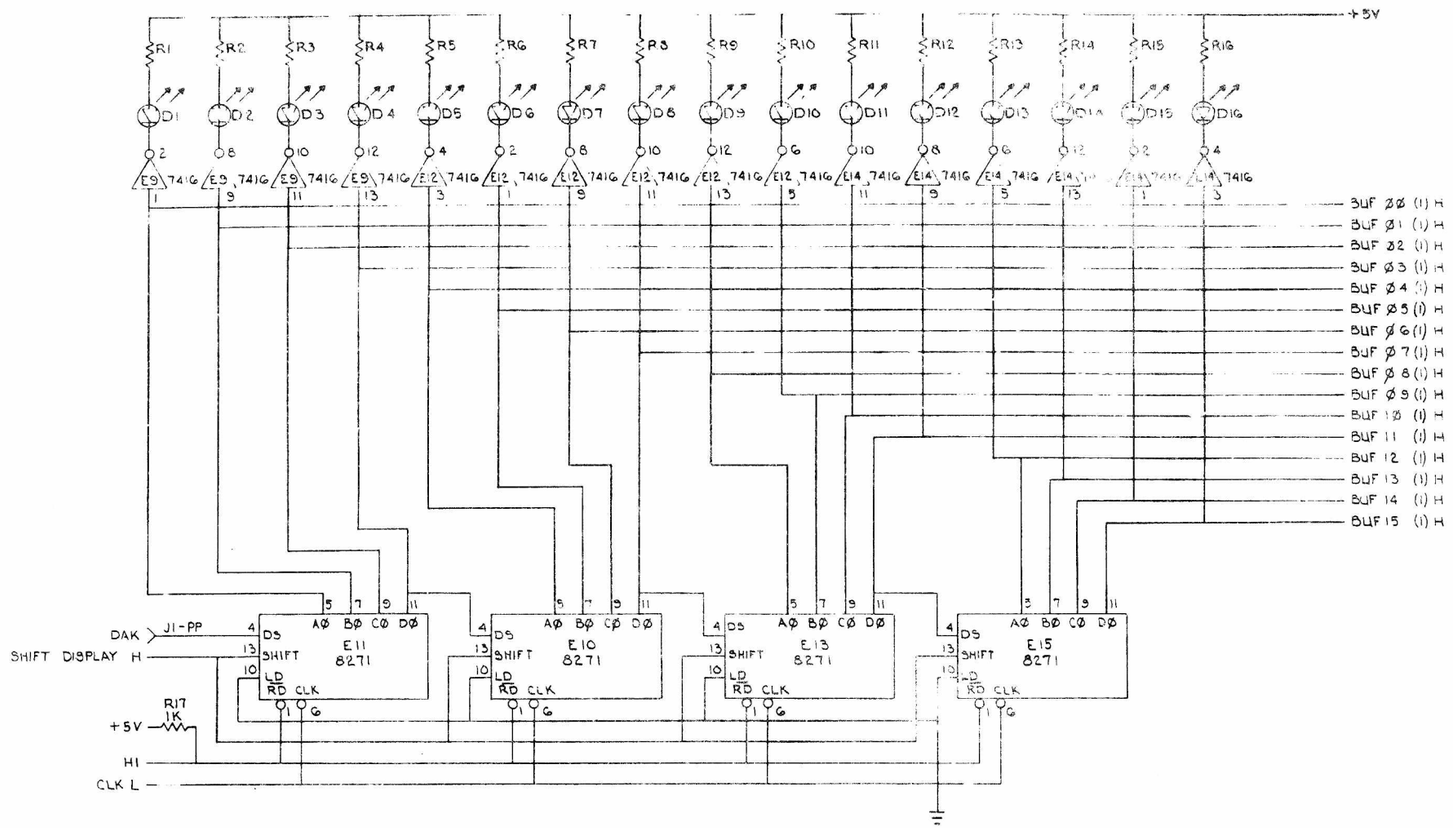
digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
BCØ8R
I/O CABLE

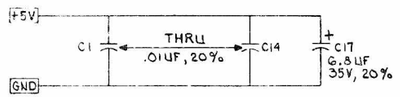
SIZE C | CODE | DWG NO. BCO8R-0-0 | REV J

126

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



UNLESS OTHERWISE INDICATED:
RESISTORS = 1/4W, 5%
CAPACITORS = 100V, 5%
DIODES ARE LIGHT EMITTING
PIN 14 = +5V, PIN 7 = GND ON DEC 7404, 7416, 7417
PIN 16 = +5V, PIN 8 = GND ON DEC 8271, 74123, 74193



QTY	REF DESIGNATION	DESCRIPTION	PART NO	ITEM NO

PARTS LIST

ETCH BOARD REV D

REVISIONS	CHANGE NO.	CHK	DRN	DATE
B	5409766-00001	RK	R. KRISHNA	3-2-72
C	5409766-00002	RK	R. KRISHNA	4-14-72
D	5409766-00003	RK	R. KRISHNA	6-27-72
E	5409766-00004	RK	R. KRISHNA	7-5-72
F	5409766-00005	GG	G. GRAHAM	11-6-72
		BJ	B. STRONG	4-23-73
		BJ	B. STRONG	5-1-73

DRN. Roger J. Doucette DATE 18 Jan 72
CHKD Rodney DATE 26 Jan 72
ENG R Krishna DATE 2-10-72
PROJ ENG. R Krishna DATE 2-10-72
PROD. R Patten DATE 2-10-72
NEXT HIGHER ASSY E-IA-5409766-0-0
SCALE
SHEET 1 OF 3

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE 11/05 CONSOLE

SIZE D | CODE CS | NUMBER 5409766-0-1 | REV. F

DIST

SEMICONDUCTOR CONVERSION CHART

DEC NO.	EIA NO.	DEC NO.	EIA NO.

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

J1
E KEY LOAD ADRS (1) L
H KEY EXAM (1) L
K KEY CONT (1) L
M KEY HLT ENB (1) L
P KEY START (1) L
S KEY DEP (1) L

R27 47
R28 47
R29 47
R30 47
R31 47
R32 47
+5V
R33 1K
R34 1K
R35 1K
R36 1K
R37 1K
R38 1K
R39 1K
R40 1K
R41 1K
R22 1K
R23 1K
R25 1K

LOAD ADDRESS S6 UP DOWN
EXAMINE S5 UP DOWN
CONTINUE S4 UP DOWN
HALT S3 UP DOWN
START S2 UP DOWN
DEPOSIT S1 UP DOWN

7416 7417

+5V R42 1K
PANEL LOCK
L = Enable
7404
PUP L

RUN 1-C
DIT
R24 +5V

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

ETCH BOARD REV D

REV	CHANGE NO. REVISIONS	CHK	DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

DRN. Roger V Duquette DATE 13 Jan 72
CHK'D. Conway DATE 26 Jan 72
ENG. P Krishna DATE 2-10-72
PROJ ENG. P Krishna DATE 2-10-72
PROD. R.K. Peterson DATE 2-10-72
NEXT HIGHER ASSY E-IA-5409566-0-0
SCALE
SHEET 2 OF 3

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE 11/05 CONSOLE

SIZE D CODE CS NUMBER 5409766-0-1 REV. F
DIST.

DEC FORM NO DRD-135

128

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission

J1

BB SW 15 (I) H
DD SW 14 (I) H
FF SW 13 (I) H
JJ SW 12 (I) H
LL SW 11 (I) H
NN SW 10 (I) H
RR SW 09 (I) H
TT SW 08 (I) H
J SW 07 (I) H
L SW 06 (I) H
N SW 05 (I) H
R SW 04 (I) H
T SW 03 (I) H
V SW 02 (I) H
X SW 01 (I) H
Z SW 00 (I) H

+5V
R21
1K

S22 S21 S20 S19 S18 S17 S16 S15 S14 S13 S12 S11 S10 S9 S8 S7

J1

E5 7404 → HH SCAN ADRS 01 (I) L
E5 7404 → KK SCAN ADRS 02 (I) L
E5 7404 → MM SCAN ADRS 04 (I) L
E5 7404 → SS SCAN ADRS 08 (I) L
E7 7416 → SHIFT DISPLAY H
E7 7416
E7 7416
E7 7416

R26
1K
+5V

PUP-L
J1-CC
E4 74123
R18 1K
R19 27K
R20 27K
C15 1000PF
C16 100PF
E4 74123

E6 74193 UP CNT, DN CNT, LD, CLEAR, CA QB QC QD
E8 74193 UP CNT, DN CNT, LD, CLEAR, QA QB QC QD

+5V
HI
CLK L

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

ETCH BOARD REV D

REV	CHANGE NO.	REVISIONS	DEC NO.	EIA NO.	DEC NO.	EIA NO.
CHK						

SEMICONDUCTOR CONVERSION CHART

DRN. ROGER J. DOUCETTE DATE 20 JAN 72
CHK'D. [illegible] DATE 26 JAN 72
ENG. [illegible] DATE 2-10-72
PROJ. ENG. [illegible] DATE 2-10-72
PROD. [illegible] DATE 2-10-72
NEXT HIGHER ASSY E-IA-5409766-0-0
SCALE
SHEET 3 OF 3

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

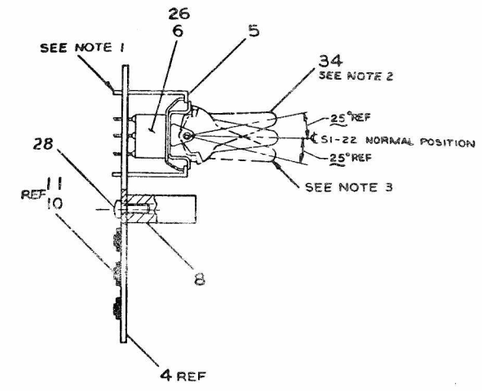
TITLE 11/05 CONSOLE

SIZE D CODE CS NUMBER 5409766-0-1 REV. F
DIST.

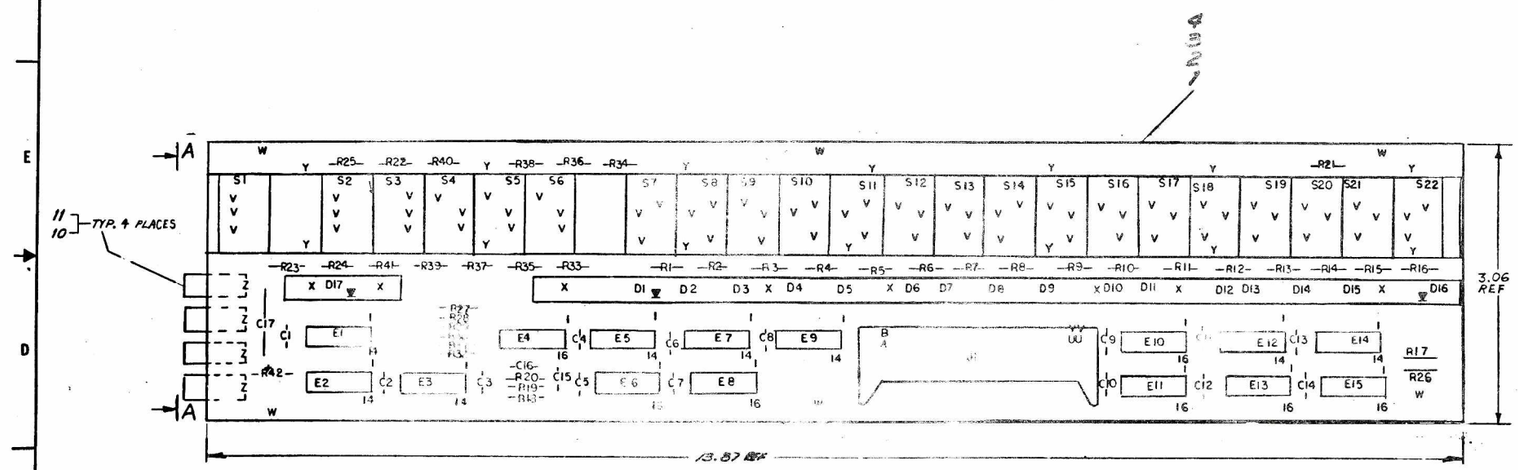
DEC FORM NO. DRD-135

This drawing and specifications, both are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

NOTES:
1. ATTACH SWITCH BRACKET (ITEM #3) TO ETCH BOARD (ITEM #9) BY TURNING SCREWS (#6) TORQUE ON SWITCH BRACKET USING TWISTING TOOL # 8-MD-7600203 (14 PLACES)
2. ASSEMBLE S2, 3, 4, 5 & 6 AS SHOWN.
3. ASSEMBLE S1 & S7 THRU S22 AS SHOWN.



VIEW A-A



DEC 74183	8	16		
DEC 74193	8	16		
DEC 8271	8	16		
IC TYPE	GND	+5V		

GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE

IC PIN LOCATIONS

ITEM NO.	AWG	FROM PT	TO PT

JUMPER LIST

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
				36
				35
22		SOCKET	D-PS-1210786-00	34
				33
				32
				31
				30
				29
8		POZI-DRIVE TYPE F 4-40 x 5/16	9009236	28
				27
5	S1,S2,S4,S5,S6	SWITCHES, MOMENTARY	1210841	26
1	C3	IC, DEC 7417	1909929	25
1	C4	IC, DEC 74123	1910436	24
2	C6, C8	IC, DEC 74193	1910018	23
6	C9, C10, C14, C7, C11, C12	IC, DEC 7416	1909928	22
1	C13	IC, DEC 7409	1909686	21
4	C5, C6, C13, C15	I.C. DEC 8271	1909615	20
2	R19, R20	RES. 27Ω ¼W 5%	1303946	19
11	R-R18 R29	RES. 180 OHM 5%	1301322	18
12	R-R1 to R5, R7, R8, R10 to R12	RES. 1K ¼W 5%	1300365	17
6	R13-R32	RES. 47 ¼W 5%	1300202	16
14	C1-C14	CAP. .01 MF 100V 20%	1000810	15
1	C17	CAP 6.8 MF 35V 20%	10000687	14
2	C15, C16	CAP. 100 PF 100V 5%	1000076	13
17	D1-D17	DIODE, LIGHT EMITTING (RA)	1110869	12
4		SOCKET "858-9 SIMPSON	3007837	11
4		PASTAN TAB	9007112	10
3		LED HOLDER (G.R.)	1210795-2	9
1		SINGLE LED HOLDER (R.R.)	1210848-2	8
1	J	CONNECTOR	1203941	7
11	S7-S22, S3	SWITCHES TOGGLE	1210840	6
1		SUPPORT, SWITCHES	D-MD-7607270-2-0	5
1		ETCH CIRCUIT BOARD	E-IA-5007965-0-0	4
As Req		MODULE ECO HISTORY	E-MD-5007966-0-0	3
As Req		CIRCUIT SCHEMATIC	E-CS-5007966-0-0	2
As Req		X-Y COORDINATE MAP LOCATION	X-CO-5007966-0-0	1

PARTS LIST

ETCH BOARD REV D

DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

REVISIONS	DESCRIPTION	ORIGINATED	DRAWN	CHECKED	ENGR APPROVED	MFG APPROVED
A	ORIGINAL RELEASE	5409765-0000	B. ARMSTRONG 4-28-72	B. Armstrong 4-28-72	R. KRISHNA 4-28-72	R. Krishna 4-28-72
B	ADD C17	5409765-0001	B. ARMSTRONG 5-16-72	B. Armstrong 5-16-72	R. KRISHNA 5-16-72	R. Krishna 5-16-72
C	ADD C16	5409765-0002	B. ARMSTRONG 7-5-72	B. Armstrong 7-5-72	R. KRISHNA 7-5-72	R. Krishna 7-5-72
D	ADD C1	5409765-0003	B. ARMSTRONG 7-25-72	B. Armstrong 7-25-72	R. KRISHNA 7-25-72	R. Krishna 7-25-72
E	ADD C1	5409765-0004	B. ARMSTRONG 9-6-72	B. Armstrong 9-6-72	R. KRISHNA 9-6-72	R. Krishna 9-6-72
F	ADD C1	5409765-0005	B. ARMSTRONG 9-13-72	B. Armstrong 9-13-72	R. KRISHNA 9-13-72	R. Krishna 9-13-72

DRAWN	B. Armstrong	DATE	4-28-72
CHKD	R. Krishna	DATE	5-10-72
ENG.	R. Krishna	DATE	5-10-72
PROJ. ENG.	R. Krishna	DATE	5-10-72
MFG.	P. Peterson	DATE	5-10-72
NEXT HIGHER ASSY	D UA-K111-0-0		
SCALE	2/1		
SHEET	1 OF 1		

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: ETCH BOARD ASSY. (1105 CONSOLE)

SIZE	CODE	NUMBER	REV.
E	IA	5409766-0-0	F

DIST.

5409766-0-0

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

DRAWING DIRECTORY

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1972 , DIGITAL EQUIPMENT CORPORATION"

CUSTOMER PRINT SET INDEX

	SEQUENCE		SEQUENCE
DRAWING DIRECTORY	B-DD-H75Ø-Ø		
UNIT ASSEMBLY	E-UA-H75Ø-Ø-Ø		
CIRCUIT SCHEMATIC	D-CS-H75Ø-Ø-1		
DIODE BOARD,P.S.	E-IA-5409498-Ø-Ø		
CIRCUIT SCHEMATIC	B-CS-5409498-Ø-1		
REGULATOR BOARD	E-IA-5409728-Ø-Ø		
CIRCUIT SCHEMATIC	D-CS-5409728-Ø-1		
5V REGULATOR BOARD	E-UA-H744-Ø-Ø		
5V REGULATOR	D-CS-H744-Ø-1		
H75Ø POWER SUPPLY HARNESS	E-IA-7009207-Ø-Ø		

THIS IS PRINT SET

UNIT VARIATIONS		PRINT SET
VAR	TITLE	H75Ø-Ø
H75Ø-Ø	H75Ø POWER SUPPLY	X

REVISIONS		
DATE	CHG. NO.	
3-73	H750-00001	A
5-73	H750-2	B
6-73	H750-3	C
7-73	H750-4	D
8-73	H750-5	E

USED ON OPTION/MODEL	
11/35	

SHEET 1 OF 3

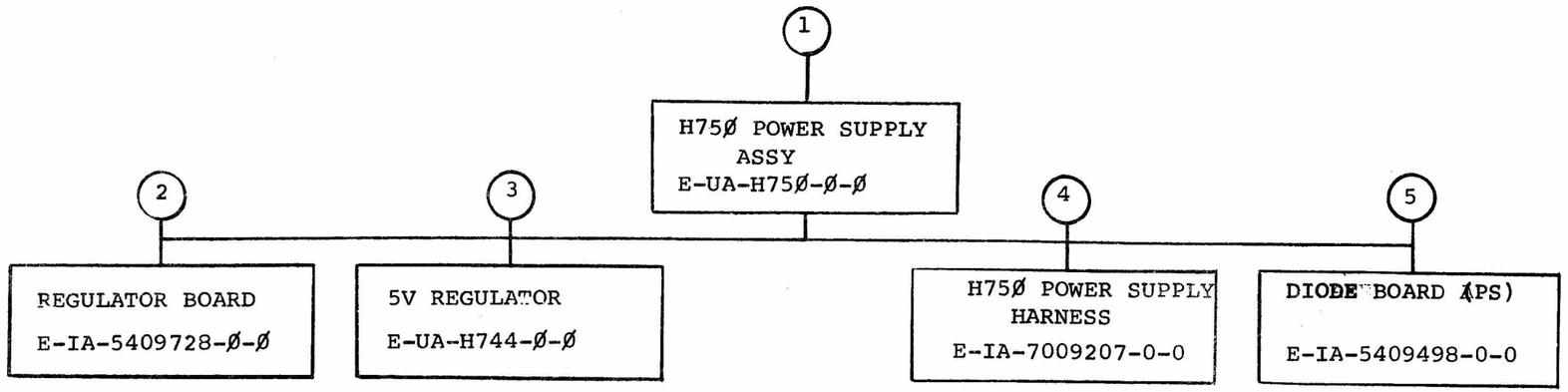
DRN.	DATE	1-15-72
CHK'D	DATE	1-16-72
PROJ ENG.	DATE	2/12/73
PROD.	DATE	2-21-73
FIELD SERV.	DATE	2/13/73

TITLE: POWER SUPPLY H75Ø

SIZE	CODE	NUMBER	REV
B	DD	H75Ø-Ø	E

DIST

DRB 106



TITLE		SIZE	CODE	NUMBER	REV
POWER SUPPLY H75Ø	SHEET 2 OF 3	B	DD	H75Ø-Ø	E

ELECTRICAL

CUSTOMER PRINT SET H75Ø-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
X	X	1	E-UA-H75Ø-Ø-Ø	D	2	H75Ø POWER SUPPLY ASSY	
X	X		D-CS-H75Ø-Ø-1	A	1	CIRCUIT SCHEMATIC (H75Ø PS.)	
	X		A-SP-H75Ø-Ø-3	A	1	TEST PROCEDURE	
			1211222		1	RELAY	
X	X	2	E-IA-5409728-0-0	#	1	REGULATOR BOARD	
X	X		D-CS-5409728-0-1	#	1	CIRCUIT SCHEMATIC	
			K-CO-5409728-0-4		1	X-Y COORDINATE HOLE LOC.	
			B-MH-5409728-0-6		1	MODULE ECO HISTORY	
			5009727		1	ETCH BOARD	
X	X	3	E-UA-H744-Ø-Ø	#	1	5V REGULATOR	
X	X		D-CS-H744-Ø-1	#	1	CIRCUIT SCHEMATIC	
			B-MH-H744-Ø-4		1	X-Y COORDINATE HOLE LOCATION	
			K-CO-H744-Ø-5		1	ASSY/DRILLING HOLE LOCATION	
			D-AH-H744-Ø-6		1	MODULE ECO HISTORY	
			5009725		1	ETCH BOARD	
X	X	4	E-IA-7009207-0-0	#	1	H75Ø POWER SUPPLY HARNESS	
X	X	5	E-IA-5409498-0-0	#	1	DIODE BOARD P.S.	
X	X		B-CS-5409498-0-1	#	1	CIRCUIT SCHEMATIC	
			K-CO-5409498-0-4		1	X-Y COORDINATE HOLE LOC.	
			B-MH-5409498-0-6		1	MODULE ECO HISTORY	
			E-IA-5009497-0-0		1	ETCH CIRCUIT BOARD	
	X	6	D-IA-7009227-0-0	#	1	TRANSFORMER REWORK (T1)	
			1611224		1	TRANSFORMER	
	X	7	D-IA-7009228-0-0	#	1	TRANSFORMER REWORK (T2)	
			1611225		1	TRANSFORMER	
	X	8	D-IA-7009229-0-0	#	1	TRANSFORMER REWORK (T3)	
			1610150		1	TRANSFORMER	

MECHANICAL

CUSTOMER PRINT SET H75Ø-Ø	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		1	E-UA-H75Ø-Ø-Ø	D	2	H75Ø POWER SUPPLY ASSY	
	X		E-IA-7409723-0-0	#	2	CHASSIS POWER SUPPLY	
			1209403		1	FAN SUPER BOXER	
	X		C-MD-7409722-0-0	#	1	COVER, POWER SUPPLY	
			A-DC-7411006-0-0		1	DECAL	
		2	E-IA-5409728-0-0	#	1	REGULATOR BOARD	
			D-CS-5409728-0-1	#	1	CIRCUIT SCHEMATIC	
			C-IA-5310126-0-0		1	HOLDER CAPACITOR	
			C-MD-5309779-0-0		1	CONTACT,COMMON CAPACITOR	
			C-MD-5309781-0-0		1	CONTACT, CAPACITOR	
		3	E-UA-H744-Ø-Ø	#	1	5V REGULATOR	
			D-CS-H744-Ø-1	#	1	CIRCUIT SCHEMATIC	
		4	E-IA-7009207-0-0	#	1	H75Ø POWER SUPPLY HARNESS	
		5	E-IA-5409498-0-0	#	1	DIODE BOARD P.S.	
			B-CS-5409498-0-1	#	1	CIRCUIT SCHEMATIC	
		6	D-IA-7009227-0-0	#	1	TRANSFORMER REWORK (T1)	
			1611224		1	TRANSFORMER	
		7	D-IA-7009228-0-0	#	1	TRANSFORMER REWORK (T2)	
			1611225		1	TRANSFORMER	
		8	D-IA-7009229-0-0	#	1	TRANSFORMER REWORK (T3)	
			1610150		1	TRANSFORMER	

CUSTOMER PRINT SET CODES

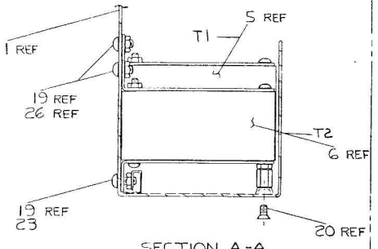
X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

TITLE		SIZE	CODE	NUMBER	REV
POWER SUPPLY H75Ø	SHEET 3 OF 3	B	DD	H75Ø-Ø	E

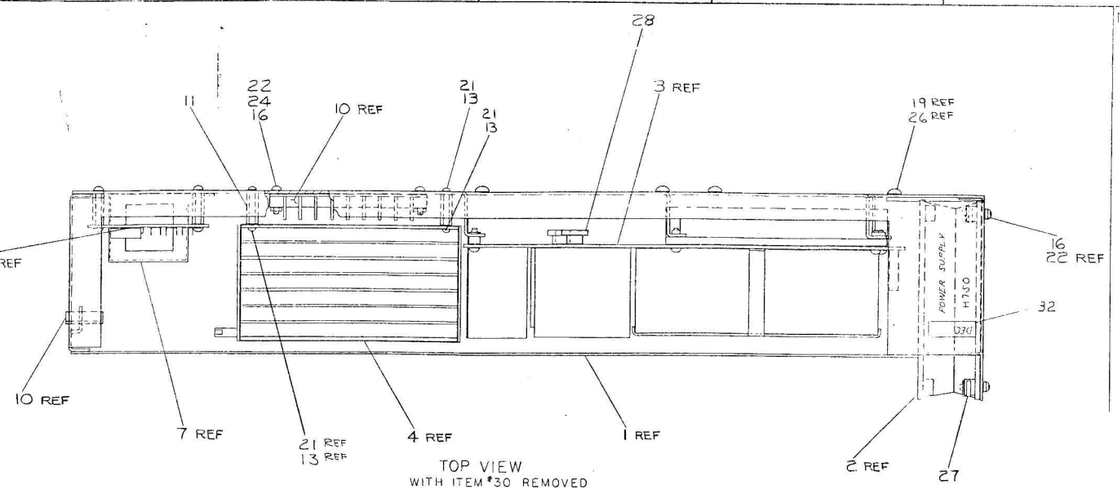
DRB 108

DEC 16-(325)-1062-2B-R972

THE INFORMATION AND DESIGN DISCLOSURE HEREON ARE THE PROPERTY OF GENERAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
COPYRIGHT © 1973
GENERAL EQUIPMENT CORPORATION

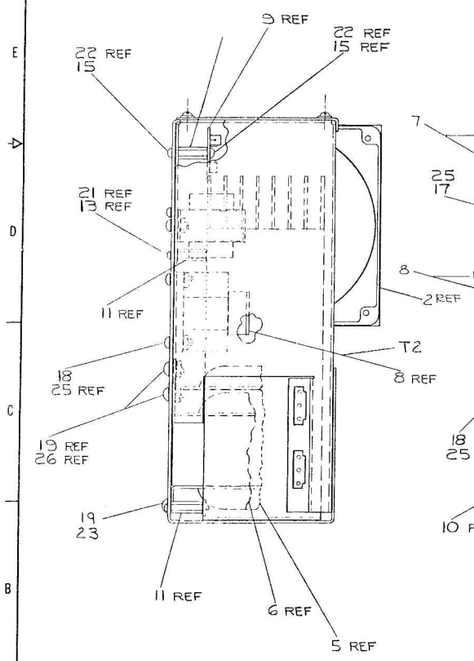


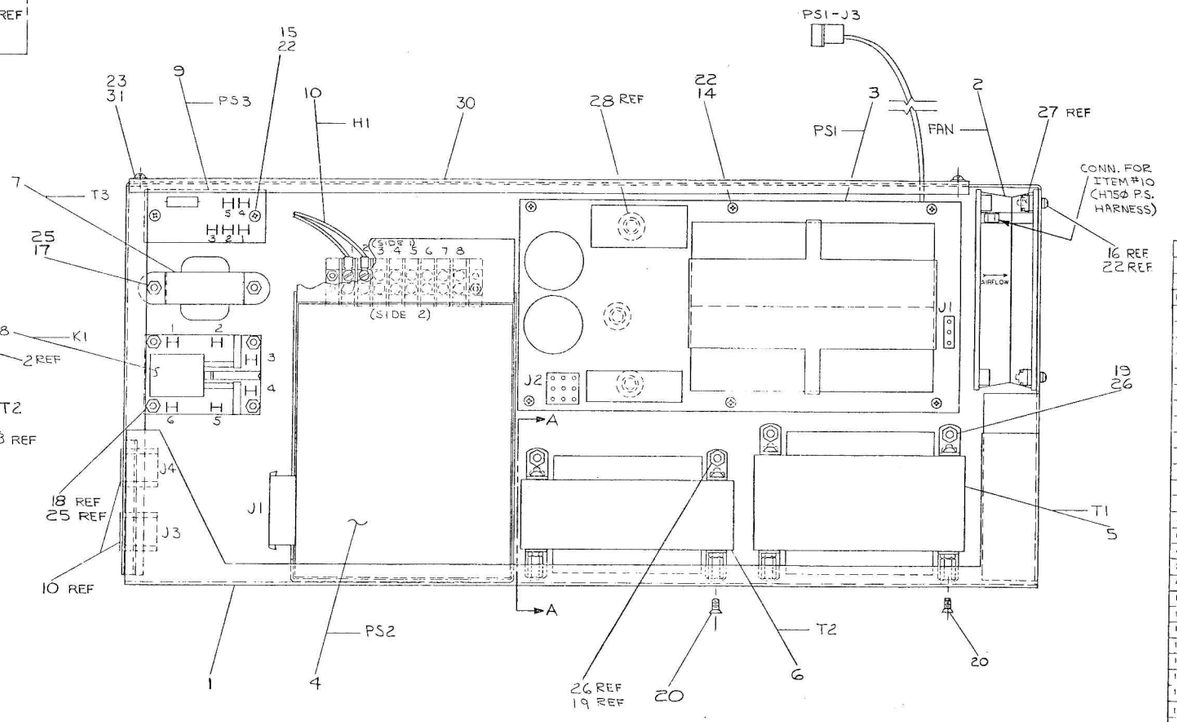
SECTION A-A



TOP VIEW
WITH ITEM #30 REMOVED

NOTES:
1. FOR EASE IN HANDLING AND MANUFACTURING, ITEMS IN THE H750 POWER SUPPLY SHOULD BE ASSEMBLED AND INSTALLED IN THE CHASSIS (ITEM #1) IN THE FOLLOWING ORDER:
   A) THE RELAY (ITEM #8), TRANSFORMER REWORK (ITEM #7), DIODE BOARD (ITEM #9), HARNESS (ITEM #10), AND FAN (ITEM #2) SHOULD BE INSTALLED IN CHASSIS (ITEM #1) FIRST.
   B) TRANSFORMER (ITEM #5) AND TRANSFORMER (ITEM #6) TO CHASSIS.
   C) REGULATOR BOARD (ITEM #3) TO CHASSIS.
   (D) REMOVE PLASTIC SHIELD AND SCR FROM ITEM #4 (H744) AND REPLACE WITH 4 ITEM #11, THEN INSTALL TO CHASSIS.





ITEM NO	QTY	DESCRIPTION	PART NO
32	1	DECAL	A-LO7411006
31	4	SCREW, PHIL TRUS HD 10-32x3/8	9006070-3
30	1	COVER, POWER SUPPLY	E-MD-7409722
29	REF	TEST PROCEDURE	E-SP-H750-2-1
28	3	BUSHING, NYLON FLANGE	9008426
27	4	CLIP, FAN MTG. #6	9009165
26	4	NUT, KEPS #10-32	9006565
25	6	NUT, KEPS #8-32	9006563
24	4	NUT, KEPS #6-32	9006560
23	8	WASHER, INT. TOOTHLOCK #10	9008635
22	14	WASHER, INT. TOOTHLOCK #6	9008633
21	8	WASHER, INT. TOOTHLOCK #4	9008632
20	4	SCREW, PHLFLAT HD #8-32 X .25 L	9006035-2
19	8	SCREW PHLTRUSS HD #10-32 X .44 L	9006072-3
18	4	SCREW PHL TRUSS HD #8-32 X .62 L	9006040-3
17	2	SCREW PHL TRUSS HD #8-32 X .38 L	9006037-3
16	6	SCREW, PHL PAN HD #6-32 X .62 L	9006025-1
15	4	SCREW, PHL TRUSS HD #6-32 X .38 L	9006022-3
14	6	SCREW, PHL PAN HD #6-32 x .50L	9006024-1
13	4	SCREW, PHL PAN HD #4-40 X .31 L	9006010-1
12	2	SPACER #6 32 X .75 L	9006859
11	4	STANDOFF #4-40 X .75 TO .1WE & #2	9009284
10	1	H750 POWER SUPPLY HARNESS (#1)	E-TA-7009207-0-0
9	1	DIODE BOARD P.S. (#9)	E-TA-5409498-0-0
8	1	RELAY (#4)	1211222
7	1	TRANSFORMER REWORK (#3)	E-TA-7003226-0-0
6	1	TRANSFORMER REWORK (#2)	E-TA-7003229-0-0
5	1	TRANSFORMER REWORK (#1)	E-TA-7003230-0-0
4	1	5V REGULATOR (#5)	E-UA-M744-0-0
3	1	REGULATOR BOARD (#6)	E-TA-5409728-0-0
2	1	FAN, SUPER BOXER (115)	1203403
1	1	CHASSIS POWER SUPPLY	E-TA-7003123-0-0

PARTS LIST

FIRST USED ON OPTION/MODEL: H750

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: XXX ± .005, XX ± .02, X ± .1
ANGLES: 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL: SEE PARTS LIST
FINISH:
DRN: DATE
CHK'D: DATE
ENG: DATE
PROJ ENG: DATE
PROD: DATE
NEXT HIGHER ASSY: D-UA-1136-0-0
SCALE: NONE
SHEET: 1 OF 1

GENERAL EQUIPMENT CORPORATION

TITLE: H750 POWER SUPPLY ASSY

SIZE: E | CODE: UA | NUMBER: H750 - 0 - 0 | REV: D | DIST:

CHANGE NO. | ZONE | REV.
5 VOLT 150-200 OHMS

THIS DRAWING AND SPECIFICATION, EITHER OR BOTH OF THESE ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND MAY NOT BE REPRODUCED OR USED IN WHOLE OR IN PART FOR ANY PURPOSE WITHOUT THE WRITTEN PERMISSION OF DIGITAL EQUIPMENT CORPORATION.
COPYRIGHT © 1973
DIGITAL EQUIPMENT CORP. - MASS.

WIRE TABLE

WIRE LENGTH (INCHES)	WIRE GAUGE	WIRE COLOR	FROM CONNECTION	TO CONNECTION	REMARKS
		—	H1-P1		
		—	— J2	PS1-J3	
		—	— J5		
		—	H1-J3	TO CHASSIS ITEM #1	
		—	H1-J4		
	18	RED	H1-J5	TO FAN ITEM # 2	
		WHT	H1-J6		
10 (T1)		WHT	H1-7	K1-6	
		RED	H1-8	K1-3	
		WHT	H1-9	K1-4	
		ORN	H1-10	K1-5	
		VIO	H1-11	K1-2	
		RED	H1-12	K1-1	
		RED	H1-13	P33-2	
		ORN	H1-14	P33-3	
	14	BLK	H1-16	P33-5	
	18	BLK	H1-17	P33-2	
	—	—	— J1	PS1-J1	
5 (T1)	14	BLK	T1-1	H1-TB1-5	ALL CONNECTIONS TO H1-TB1 ARE ON SIDE #2
		RED	T1-2	H1-TB1-6	
		RED/WHT	T1-3	H1-TB1-7	
	14	BLK/WHT	T1-4	H1-TB1-8	
	—	—	T2-P1	PS2-J1	
	—	—	T2-J1	—	
6 (T2)	14	BLK	T2-7	H1-TB1-3	ALL CONNECTIONS TO H1-TB1 ARE ON SIDE #2
		RED	T2-8	H1-TB1-6	
		RED/YEL	T2-9	H1-TB1-7	
	14	WHT	T2-10	H1-TB1-8	
7 (T3)	20	BRN	T3-1	H1-TB1-2	SIDE #1
		RED	T3-2	H1-TB1-3	SIDE #1
		ORN	T3-3	H1-TB1-7	SIDE #1
		YEL	T3-4	K1-6	
		GRN	T3-5	P33-4	
		GRN	T3-6	P33-1	
	20	BLU	T3-7	H1-TB1-1	SIDE #2

FIRST USED ON OPTION MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
H750		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES
DECIMALS: XXX ± .005, XX ± .02, X ± .1 — ANGLES: 1° 30'
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓

DRN — DATE
CHK'D — DATE 2/12
ENG. — DATE 2/12
PROJ. ENG. — DATE
MFG — DATE 2/12

DIGITAL EQUIPMENT CORPORATION

TITLE: H750 POWER SUPPLY ASSY.

MATERIAL: SEE PARTS LIST
NEXT HIGHER ASSY.: D-UA-H750-0-0
FINISH
SCALE
SHEET 1 OF 2

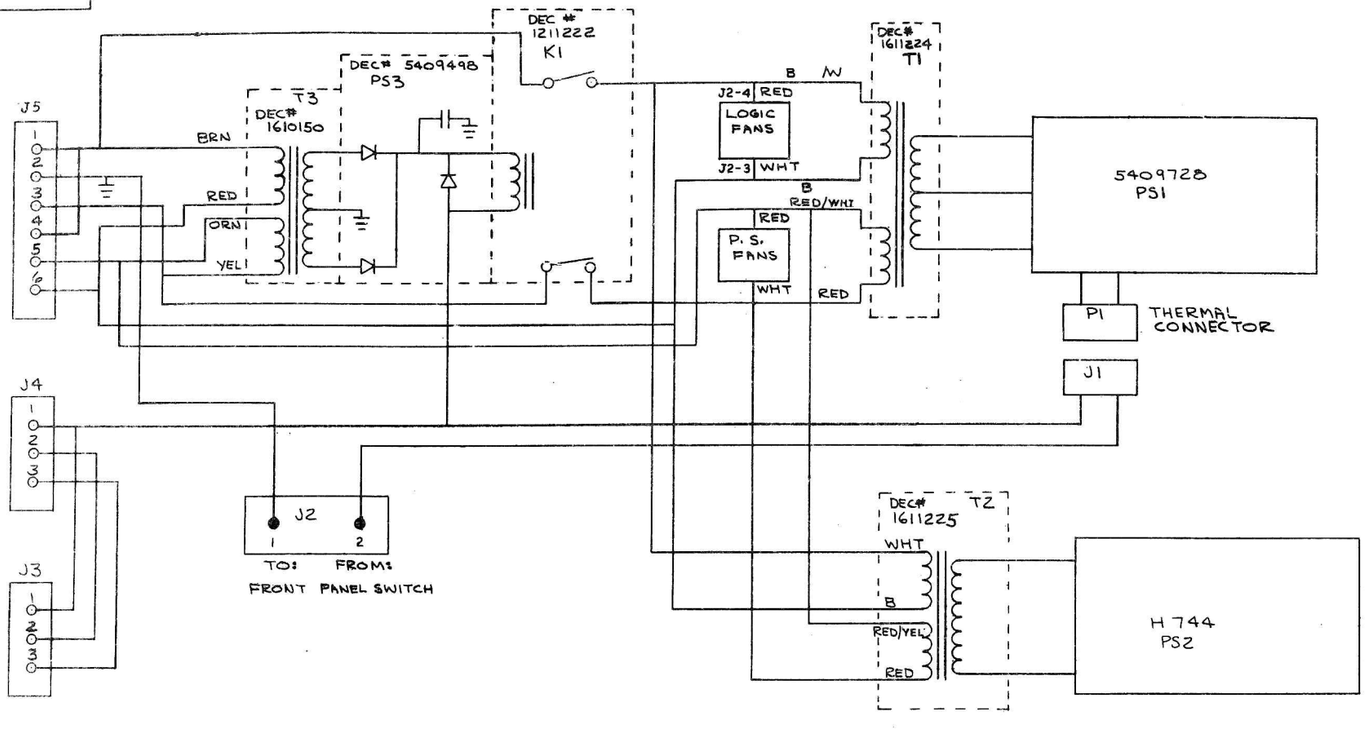
SIZE E | CODE | NUMBER H750 | REV. D

CHANGE NO. | REV. | REVISIONS | DATE | BY

DIGITAL EQUIPMENT CORP. MAYNARD, MASS.

1135

THIS DRAWING AND SPECIFICATIONS, HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION
COPYRIGHT © 1973 DIGITAL EQUIPMENT CORPORATION



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/35		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: .xxx = .005, .xx = .02, .x = .1
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √

MATERIAL
FINISH

DRN. T. Davis	DATE 1-17-73	
CHKD. John Reid	DATE 2-13-73	
ENG. C. R. Case	DATE 2-13-73	
PROJ. ENG. R. J. Wolf	DATE 2-14-73	
APPD. A. Stringer	DATE 2-21-73	

NEXT HIGHER ASSY. E-UA-H75Ø-Ø-Ø
SCALE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

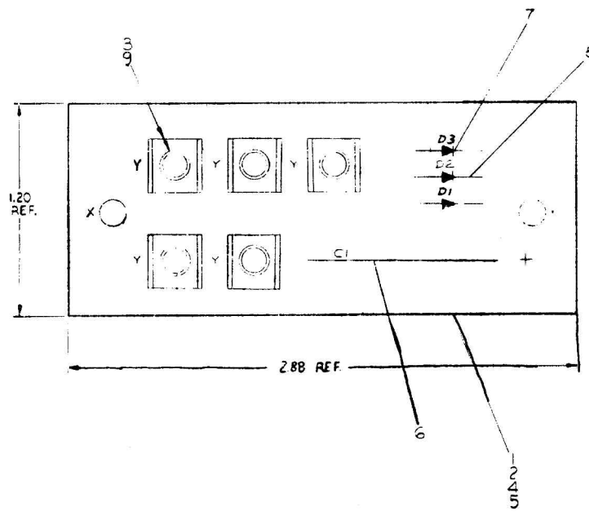
TITLE
H75Ø
POWER SUPPLY

SIZE	CODE	NUMBER	REV.
D	CS	H75Ø-Ø-1	A

DIST

B. WOLF R. J. Wolf 2-14-73

DCSH750-00005 | A | C. Case 2-27-73



QTY.	REF DESIGNATION	DESCRIPTION	PART NO	ITEM NO
5	Y	FASTON TABS	9007113	9
2	D1, D2	DIODE IN4002	1104861	8
1	D3	DIODE D664	1100114	7
1	C1	CAP. 20uf 50V -10-75% ELECT	1002839	6
1		ETCHED CIRCUIT BOARD	E1A-5009497-0-0	5
REF		MODULE ECO HISTORY	B-MH-5409498-0-6	4
5	Y	EYELETS	9007837	3
REF		X-Y COORDINATE HOLE LOC.	K-C0-5409498-0-4	2
REF		CIRCUIT SCHEMATIC	B-C0-5409498-0-1	1

PARTS LIST

ETCH BOARD REV

IC TYPE	GND	+5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTFULLY EXCEPTIONS ARE STATED ABOVE		

IC PIN LOCATIONS

ITEM NO	AWG	FROM PT	TO PT

JUMPER LIST

DWG	REV	DRAWING NO. REVISIONS	DATE

DEC NO.	EIA NO
IN4002	IN4002
D664	IN3606

DEC NO EIA NO

SEMICONDUCTOR CONVERSION CHART

DRN. CBM Cay 7-14-71
CHKD. J. Mulgh 7-14-71
ENG. [illegible] DATE
PROJ. ENG. [illegible] DATE
PROG. [illegible] DATE
FIRST USED ON H720-H
SCALE 4/1
SHEET 1 OF 1

digital EQUIPMENT CORPORATION

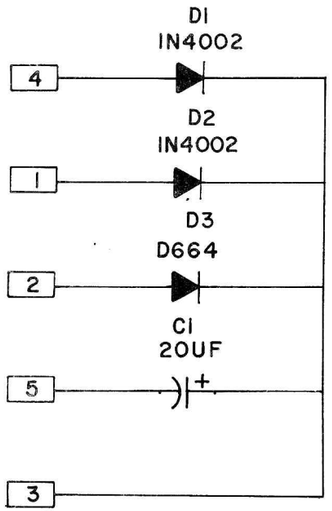
TITLE DIODE BOARD, P.S.

SIZE CODE E | NUMBER 1A 5409498-0-0 | REV.
DIST

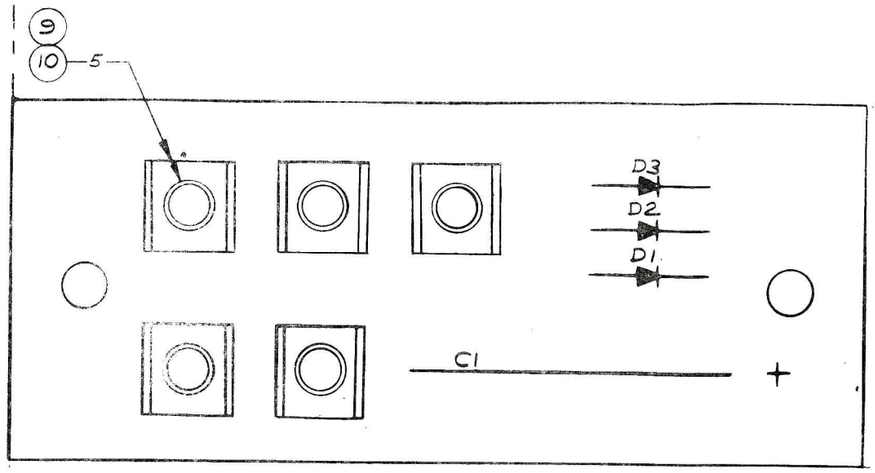
8 7 6 5 4 3 2 1

137

THIS SCHEMATIC IS FURNISHED ONLY FOR TEST AND MAINTENANCE PURPOSES. THE CIRCUITS ARE PROPRIETARY IN NATURE AND SHOULD BE TREATED ACCORDINGLY.
COPYRIGHT 1971 BY DIGITAL EQUIPMENT CORPORATION



□ = FASTON TABS



ITEM NO.	DEC PART NO.	DESCRIPTION	REF DESIGNATION	QTY.
		PARTS LIST		
10	9007837	EYELETS		5
9	9007113	FASTON TABS #41290		5
8	1100114	DIODE D664	D3	1
7	1104861	DIODE 1N4002	D1, D2	2
6	1002839	CAP. 20UF 50V -10 +75% ELECT	C1	1
5	5009497	ETCHED CIRCUIT BOARD		1
4	B-MH-5409498-0-6	MODULE ECO HISTORY		
3	D-AH-5409498-0-5	ASSY/DRILLING HOLE LAYOUT		
2	K-CO-5409498-0-4	X-Y COORDINATE HOLE LOCATION		

TRANSISTOR & DIODE CONVERSION CHART

DEC	EIA	DEC	EIA
IN4002	SAME		
D664	IN3606		

REVISIONS	REV.	CHG NO.	CHK

DRN. B. J. Haile	DATE 4/21/71	
CHK'D D. B. Lawrence	DATE 9-23-71	
ENG. R. Lewis	DATE 5-13-71	
PROD.	DATE	

M8 Cons
R. LEWIS
R. D. Hall
A
00001

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE POWER SUPPLY DIODE BOARD

SIZE	CODE	NUMBER	REV.
B	CS	5409498-0-1	A

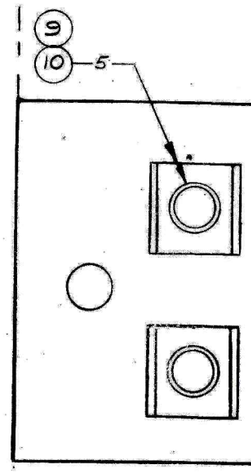
PRINTED CIRCUIT REV. B

DEC FORM NO. ORB 102

DIST. 32,41,42, 435 2

4

pmf

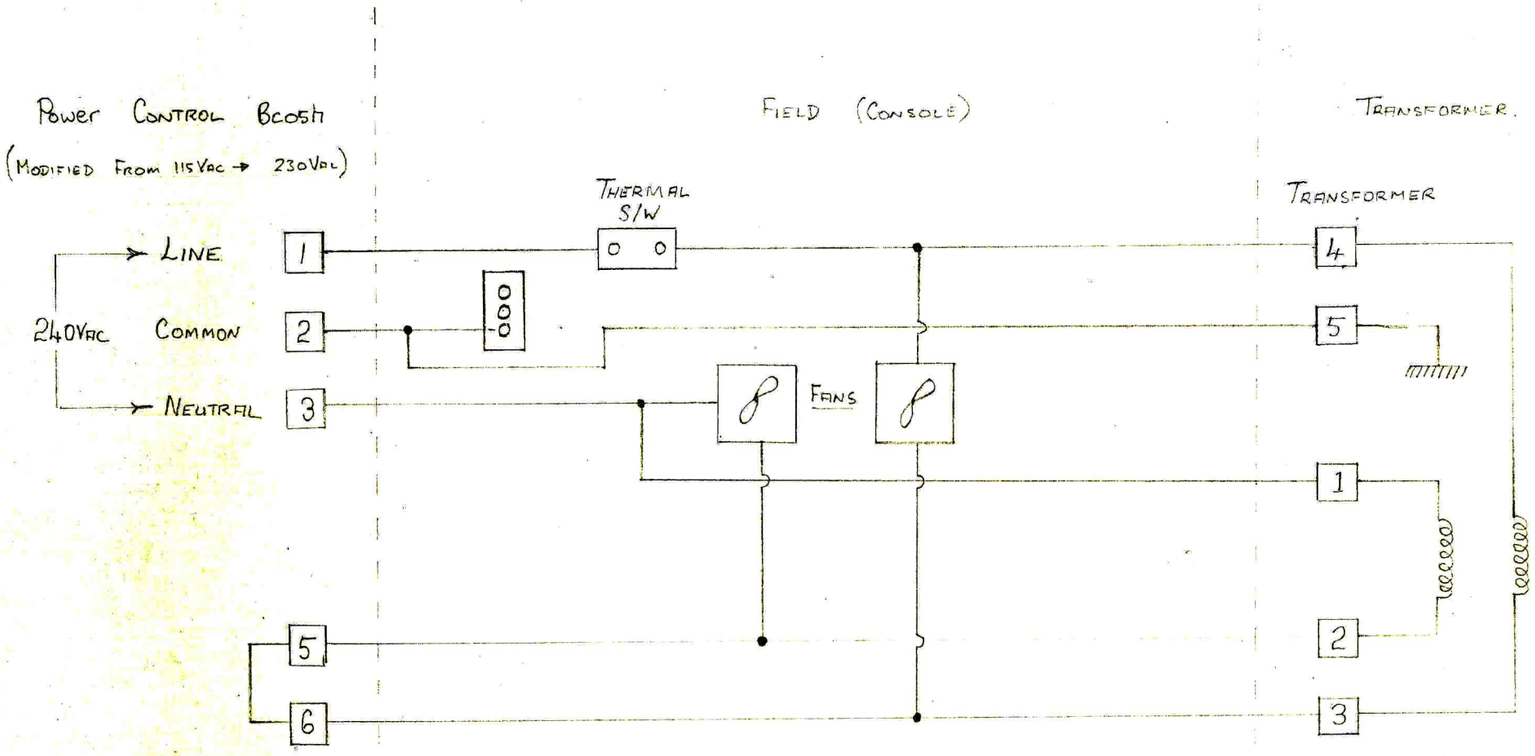


	EYELETS
	FASTON TABS #41
	DIODE D664
	DIODE 1N4002
	CAP. 20UF 50V
	ETCHED CIRCUIT BC
	MODULE ECO HISTOR
	ASSY/DRILLING HOL
	X-Y COORDINATE HC
	DESCRIPTION
	PARTS LIST

ONVERSION CHART

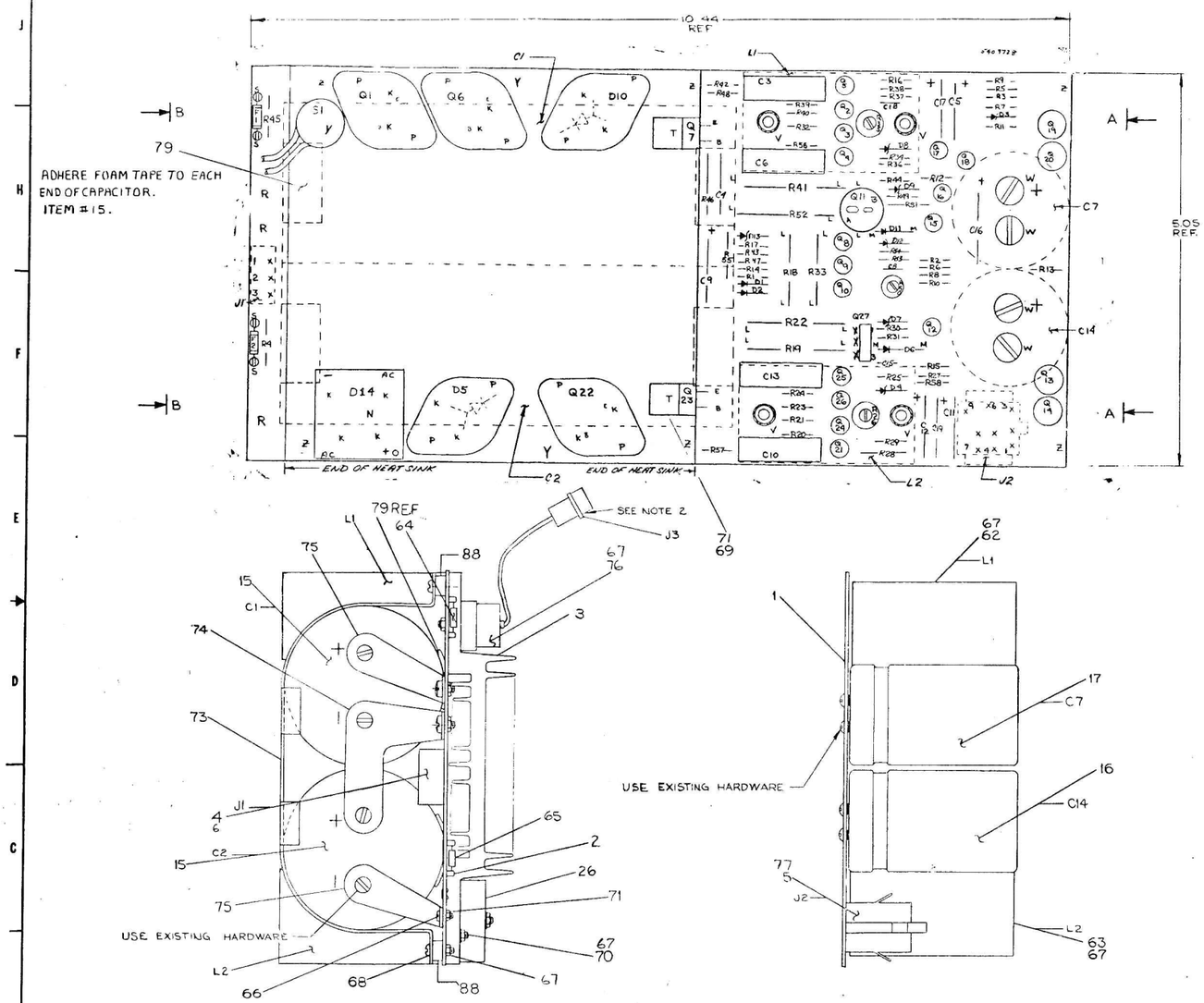
DEC	EIA

digi
EQUIP
CORPO
MAYNARD, MAS



Harness Wiring

Part Wiring Diagram of Extended Memory Pdp 11/05
(No. 4 Blast Furnace)



NOTES:

1. APPLY ITEM #8 (THERMAL COMPOUND) BETWEEN TRANSISTOR AND HEAT SINK FOR Q1, Q6, Q7, Q22, Q23, D5, D10, D14 & S1.
2. TRIM LEADS ON ITEM #76 (THERMOSTAT) TO .50" LNGTH AND ATTACH ITEM #84 (PINS) AND ITEM #63 (HOUSING) AS SHOWN.

QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
2		2 6 HOLE X 1/8 LG. SPACER	300 [illegible]	86
				85
1	J1	[illegible]	[illegible]	84
2	R9, R13	RES 470 1/4 W. 5%	1300316	83
2		PINS MALE CRIMP	2104376-1	82
1	J3	MATE-N-LOCK CONNECTOR	1123932-3	81
				80
1	D12	DIODE, ZENER, 5.1V, 2%	1111225	79
1	C12, C19	CAP 2.2 MF 35V 175% TANT	1102431	78
4		1" LG FOAM TAPE	9000687-1	77
2	R36, R40	RES 5.1 1/4 W. 5%	1319422	76
9		PIN FEMALE	1204756	75
1	S1	THERMOSTAT SPST	1120424	74
2		CONTACT, CAPACITOR	CMC-5307760-0	73
1		CONTACT, COMMON CAPACITOR	CMC-5307760-0	72
1		HOLDER, CAPACITOR	CHS-5310126-0	71
				70
5		NUT, KEPS 4-40	9008557	69
1		SCR PHL PAN HD 6-32-3/4 LG	9006026-1	68
2		SCR PHL PAN HD 4-40 X 1/2 LG	9006013-4	67
12		SCR PHL HD 6-32 X 9/16 LG	9007793-1	66
18		NUT KEPS #6-32 1/4	9008185	65
3		SCR PHL PAN HD 4-40 X 5/16 LG	9006107-4	64
1	F2	FUSE 10 AMP, PICO	1210929-01	63
1	F1	FUSE 15 AMP, PICO	1210929	62
1	L2	CHOKE 150 uH 10A MMC 4445	1611331	61
1	L1	CHOKE 200 uH 20A MMC 4289	1611717	60
1	Q27	XSTR MAC 11-3	1510765	59
1	Q1	XSTR MJ 2500	1511282	58
2	Q7, Q23	XSTR D45 HB-8	1510708-2	57
10	Q8, Q3, Q5, Q6, Q9, Q10, Q4, Q11, Q12, Q26	XSTR XA55	1510706	56
6	Q13, Q15, Q24, Q25	XSTR XA05	1510705	55
2	Q16, Q22	XSTR 2N5302	1510196	54
2	Q14, Q19	XSTR 2N1309	1501311	53
2	Q17, Q20	TRANSISTOR 2N1308	1500583	52
1	R41	RES 620, TW, 3%	1310709-2	51
				50
1	R22	RES .2 5W 5%	1309584	49
3	R26, R35, R50	POT 100, 1/2 W 20% 62 PR	1309450-05	48
1	R52	RES .1 5W 5% WW	1305872	47
1	R33	RES 39 2W 5% y.w	1310868	46
1	R10	RES 7.5K 1/8W 1% MF	1305327	45
2	R25, R34	RES 383 1/8 W 1% MF	1305125	44
6	R2, R5, R6, R11, R12, R3	RES 10K 1/8 W 1% MF	1303312	43
4	R8, R1, R7, R4	RES 1K 1/8W 1% MF	1303114	42
2	R27, R36	RES 464 1/8 W 1% MF	1303047	41
1	R51	RES 100, 3%, PTC	1310927-1	40
1	R49	RES 147, 1/8 W. 1% MF	1302874	39
				38
				37
2	R24, R47	RES 68K 1/4 W. 5%	1301327	36
5	R20, R21, R30, R48, R51	RES 10 1/4 W. 5%	1301317	35
4	R38, R53, R56, R57	RES. 10K 1/4 W 5%	1300479	34
4	R28, R46, R4, R45	RES 4.7K 1/2 W. 5%	1300465	33
1	R55	RES 2.7K 1/2 W. 5%	1300255	32
1	R19	RES .05 5W 3% /W	1310376-32	31
2	R29, R37	RES 1K 1/4 W. 5%	1300365	30
3	R44, R16, R58	RES 330 1/4 W 5%	1300295	29
1	R18	RES 100, 2W, 5%	1302790	28
7	R15, R17, R23, R31, R32, R42, R53	RES 100 1/4 W 5%	1300229	27
1	D7	DIODE IN5248B, 18V ZENER	1107966	26
2	D5, D10	DIODE 20 AMP FAST RECOVERY RECT	1110715	25
1	D14	DIODE, BRIDGE RECTIFIER	1110714	24
1	D3	DIODE, 5.1V ZENER	1102325	23
2	D6, D11	DIODE IN5624	1110420	22
2	D1, D2	DIODE IN4004	1105796	21
2	D4, D8	DIODE IN753A 6.2V ZENER	1102421	20
1	D9	DIODE AZ5 2.4 V ZENER	1101938	19
1	D13	DIODE IN748A 3.9 V ZENER	1100122	18
1	C18	CAP 680PF, 100V, DM	1000026	17
1	C9	CAP 20 uF 60V 5% TANT	1010716	16
1	C7	CAP 6000 uF 10V -10+75% S TANT	1010704	15
1	C14	CAP 3000 uF 25V -10+75% S TANT	1010703	14
2	C1, C2	CAP 24000 uF 50V -10%+75%	1010702	13
1	C16	CAP 22 uF 35V 20% S TANT	1002433	12
4	C3, C6, C10, C13	CAP 1 uF 100V 10%	1011032	11
2	C8, C15	CAP .22 uF 50V	1010274	10
2	C5, C17	CAP 5.8 uF 35V 10% S TANT	1005306	9
2	C4, C11	CAPACITOR .033 uF 100V 10% MYLAR	1000050	8
				7
A/R		THERMAL COMPOUND	9008268	6
				5
				4
1	J2	MATE-N-LOCK CONNECTOR	1209350-09	3
1	J1	MATE-N-LOCK CONNECTOR	1211742-03	2
1		HEAT SINK	1215596	1
1		SPLIT LUG	9006732	0
1		ETCHED BOARD	5009728	1
1		MODULE ECO HISTORY	DMH 5409728-0-0	2
1		X-Y COORDINATE - SILK LOC	5409728-0-0	3
1		CIRCUIT SCHEMATIC	DCS-5409728-0-0	4

PARTS LIST

ETCH BOARD REV E

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
1		5409728 INTERPLANT PACKAGE	A-PI-5700045-0-0	93
		MANUFACTURING SPECIFICATION	A-SP-5409728-0-3	92
		ASSEMBLY PROCEDURE	A-SP-5409728-0-3	91
		INSPECTION PROCEDURE	A-SP-5409728-0-3	90
		MANUFACTURING TEST PROCEDURE	A-SP-5409728-0-3	89

IC TYPE	GND	+5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE		

IC PIN LOCATIONS

ITEM NO.	AWG	FROM PT	TO PT

JUMPER

DEC. NO.	ECA NO.

SEMICONDUCTOR CONVERSION CHART

ECO NO.	ECA NO.

DRWN		DATE
CHK'D		DATE
ENG		DATE
PROJ ENG		DATE
PROD		DATE
SCALE		SHEET OF

EQUIPMENT CORPORATION

TITLE: REGULATOR BOARD

SIZE C | CODE | NUMBER 5409728-0-0 | REV. L

DWG NO. 5409728-0-0 REV. L

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

J3-1 S1 (THERMOSTAT NORMALLY CLOSED) J3-2

INPUT 28-0-28V AC 47-63HZ: AC J1-3, CENTER TAP J1-1, AC J1-2

NSS-3514 D14

F1, 15A

+39V

R45 4.7K 1/2W

R55 2.7K 1/2W

C2 24KUF 50V

C1 24 KUF 50V

J2-4 LTC L OUTPUT

D13 IN748A 3.9V

R33 .39 2W

Q1 MJ2500

D8 IN753A, 6.2V

J2-5 +15V OUTPUT

C16 22 UF 35 V

R32 100 Q2

R34 383 1%

R35 100

R37 1K

R36 464 1%

CW

R38 10K R56 10K Q3

C18 680 PF

Q4 XA05

R41 .020 7W, 3%

Q6 2N 5302

L1 100 UH 20A

R48 10

R39 5.1 R40 5.1 Q5

R42 100 Q7 D45H8 Q8

D10, 20A FAST RECOVERY

C7 6000 UF, 10V

D11 IN5624

J2-3 +5V OUTPUT

D12 5.7 V 2%

R54 10

C4 .033UF

C3 1UF

R52 1 5W

Q11 C32AX135

A G C

R53 100

C8 .22UF

Q9 R43 10K R46 4.7K 1/2W

R47 68K

R49 147 1%

C5 6.8UF 35V 10%

CW R50 100

R16 330 D9 2.4V AZ5 Q10 XA05

C17 6.8UF 35V 10%

R44 330

R51 100 3% P.T.C.

C6 1UF

D2 IN4004 R14 1K 1%

D1 IN4004 R1 1K 1%

+26V

C9 20UF 5%

R3 10K 1% R5 10K 1% R6 10K 1%

+8.3V Q17 Q18 +11.4V

J2-6 BUS DC LO L OUTPUT

J2-8 PWR OK L

J2-7 PWR OK ENABLE OUTPUT

J2-1 BUS AC LO L

R2 10K 1%

+10V

R18 100 2W R17 100

Q15 Q16 D3 5.1V

R11 10K 1% R10 7.5K 1%

Q19 2N 1309 Q20 2N 1308

R9 470

Q12 GPS A05

Q13 2N 1308 Q14 2N 1309 R13 470

R12 10K 1%

R15 100

R7 1K 1%

C10 1UF

C19 2.2UF 35V 10%

R58 330

R29 1K

D4, 6.2V IN 753A

R28 4.7K 1/2W

R27 464 1%

Q26

CW

R26 100 1/2W

C13 1UF

D5, 20A FAST RECOVERY

C14 3000UF 25V

Q27 MAC11-3

R31 100

C15 .22 UF

J2-2 GROUND OUTPUT

R30 10

C12 2.2UF 35V

R57 10K

R24 68K

R25 383 1%

D6 IN5624

D7, 18V IN5248B

R4 4.7K 1/2W

F2, 10A

−39V

C11 .033UF 100V

Q21 XA05

R20 10

R22 .2 5W

Q24 XA05

R23 100

R21 10

Q23 D45H8

R19 .06 5W 3%WW

Q22 2N 5302

L2 100UH 10A

J2-9 −15V OUTPUT

UNLESS OTHERWISE INDICATED:
1% RESISTORS ARE 1/8 W
TRANSISTORS = XA55
VOLTAGES ARE TAKEN AT NO LOAD WITH 115 VAC LINE
VOLTAGES ARE ± 10 % TAKEN BY A ≥ 10K/V METER

REV	CHANGE NO.	CHK	REVISIONS
B	5409728-00001 thru 5409728-00003	R. WOLFF	1-19-72
C	5409728-00004	R. WOLFF	2-7-72
D	5409728-00005	R. BURTON	5-1-72
E	5409728-00006 thru 5409728-00007	R. WOLFF	9-29-72
F	5409728-00008	R. WOLFF	10-26-72
G	5409728-00009	S. Baker	12-26-72
H	5409728-00010	R. WOLFF	1-5-73
J	5409728-00011	R. WOLFF	8-3-73
K	5409728-00012	Richard Burton	8-23-73
L	5409728-00013	Richard Burton	12-4-73

DEC NO.	EIA NO.	DEC NO	EIA NO
SEMICONDUCTOR CONVERSION CHART			

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

ETCH BOARD REV E

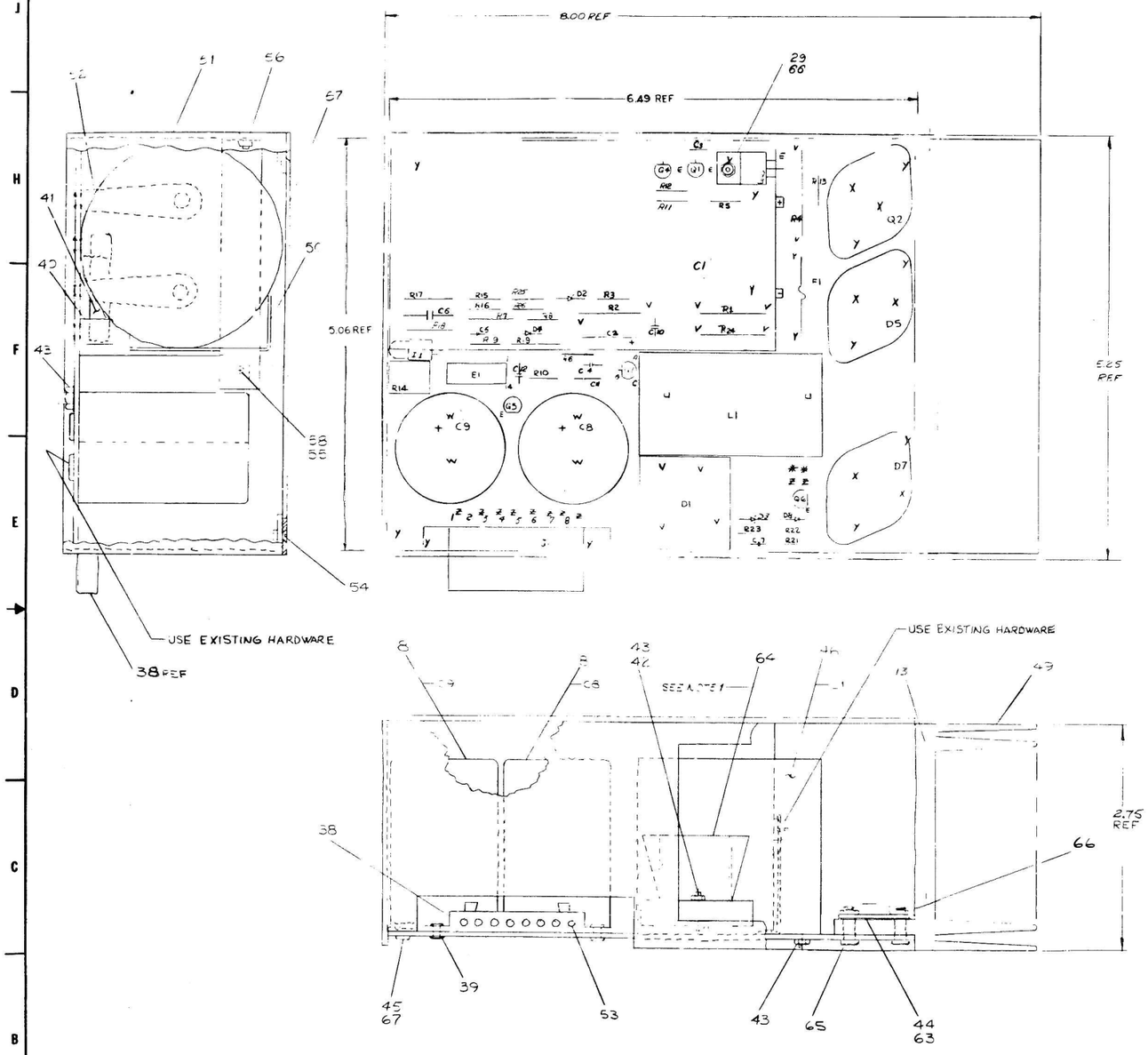
DRN. Roger V Doucette DATE 12-20-71
CHK'D. Richard Howe DATE 12-21-71
ENG. R. Howe DATE 12-28-71
PROJ. ENG. R. Howe DATE 12-28-71
PROD. DATE
NEXT HIGHER ASSY
SCALE

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE REGULATOR BOARD FOR 474C

SIZE D | CODE DCS | NUMBER 5409728-0-1 | REV L

SIZE CODE DCS NUMBER 5409728-0-1 REV L



NOTES:

1. APPLY ITEM #63 (COMPOUND, BETWEEN TRANSISTOR (Q2), DIODES (D5, D7) AND ITEM #8 (WASHER) ALSO BETWEEN ITEM #44 (WASHER) AND HEAT SINK (ITEM #42) ALSO APPLY ITEM #63 (COMPOUND, BETWEEN ITEM #3 (DIODE BRIDGE) AND ITEM #66 (HEAT SINK BRIDGE).

1	I1	5 VOLT LAMP	12.0921-1	65
2		LWASHER #6	2006632	64
7		NUT KEPS #6-32	9006557	63
6		SCR PHL PAN HD #6-32 X 1/16	9006020-1	62
1		HEAT SINK BRIDGE	1210907	61
N/R		COMPOUND THERMAL JOINT	9008268	60
1	R26	RESISTOR 1.5K 1/4W 5%	1300391	59
1	R19	RESISTOR 7.5K 1/8W 1%	1305322	58
1	R3	RESISTOR 12K 1/4W 5%	1300488	57
1	Q7	TRANSISTOR, UNIJUNCTION 2N6028	1510877	56
1		SCR PHL PAN HD #6-32 X 1/4 LG	9006020-1	55
1		COVER	CMD-5309760-0	54
1		SCR PHL FLTHD #6-32 X 1/4 LG	9006020-2	53
1		WASHER LOCK #6	9007049	52
4		SCR PHL FLTHD #4-40 X 5/16 LG	9006010-2	51
8		CONTACT FEMALE	1209856	50
2		STRAP, CAPACITOR	CMD-5309759-0	49
1		BRACKET, REGULATOR	DIA-5309756-0	48
1		HOLDER, CAPACITOR 2.5	CIA-5309760-0	47
1		HEAT SINK REGULATOR	CPS-2127-5	46
1	C3, C12	CAP 56 PF	1000012	45
1	R24	RESISTOR 10 1W	1300171	44
1	L1	REACTOR 60 MHY MMC4347	1610850	43
2		SCR PHL PAN HD #4-40 1/4 LG	9006009-1	42
2		WASHER, INSULATOR	9006721	41
3		NUT, KEPS #6-32	9006185	40
1		SCR PHL PAN HD #6-32 X 1/2 LG	9006029-1	39
1	F1	FUSE 15 AMP	9007226	38
2		FUSE CLIP	9007203	37
6		EYELET #6-47	9006732	36
1	J1	MATE-N-LOK CONN 8 PIN	1209340	35
1	E1	INTEGRATED CIRCUIT DEC 7236	1910415	34
1	Q5	TRANSISTOR A05	1510705	33
1	Q3	TRANSISTOR D45H8	1510708	32
3	Q1, Q6, Q4	TRANSISTOR NPS8555 NOT	1510706	31
1	Q2	TRANSISTOR 2N5302	1510196	30
1	R14	RES VARIABLE 200	1310852	29
1	R21	RES 5.1 1/4W 5%	1307422	28
1	R23	RES 100 1/4W 5%	1300229	27
1		SCR PPH #4-40 X 5/16 LG	9006010	26
1	R11	RES 27 1/4W 10%	1301420	25
1	R17	RES 750 1/8W 1%	1302935	24
1	R9	RES 27 1/4W 5%	1301522	23
1	R7	RES 16.2K 1/8W 1%	1309412	22
2	R8, R16	RES 1K 1/4W 5%	1300365	21
1	R18	RES 511 1/8W 1%	1302411	20
1	R25	RES 18K 1/4W 5%	1302465	19
2	R6, R15	RES 10K 1/4W 5%	1300474	18
1	R4	RES .02 5W 3%	1310876	17
1	R2	RES 820 1W 10%	1300358	16
1	R1	RES 3.9K 1W 10%	1302927	15
2	R5, R13	RES 10 1/4W 5%	1301317	14
2	R12, R10	RES 150 1/4W 5%	1300250	13
1	D3	DIODE ZENER 1 MA 5.1V	1110925	12
1	D7	SCR VCR 649P-2	1109465	11
4		SCR PPH #4-40 X 5/16 SELECTAR	9009142	10
1	D5	DIODE PWR NSR 815	1110715	9
2	D4, D5	DIODE PWR D669	1100114	8
1	D2	DIODE ZENER 1N4744	1105644	7
1	D1	DIODE BRIDGE	1110714	6
2	C8, C9	CAP 6 MFD 10V	1010704	5
1	C1	CAP 3300 MFD 50V	1010958	4
2	C4, C3	CAP .05 MF 25V	1001774	3
1	C2	CAP 1.5 MF 20V 10%	1004812	2
1	C11	CAP 2700 PF 100V 5% SM	1001637	1
2	C7, C10	CAP .01 MF 100V 20% DISC	1001610	
1	C6	CAP 2.2 MF, 20V, 10%	1002627	
1		ETCHED CIRCUIT BOARD	5009725	
		ASSY DRAWING, HOLE LAYOUT	D-AH-H744-0-5	
		X-Y COORDINATE HOLE LOCATION	XCO H744-0-9	REF
		MODULE ECO HISTORY	BMH-H744-0-6	REF
		CIRCUIT SCHEMATIC	DG-H744-0-1	REF
1		PACKING INSTRUCTIONS	API-3700374-0-0	70
1	R22	RES 680 1/4W 5%	1301429	69

QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

ETCH BOARD REV F

FIRST USED ON CPYIMCO D-UA-H742A-0-0

MA 723	7	12
IC TYPE	GND	+5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE		

IC PIN LOCATIONS

ITEM NO	AWG	FROM PT	TO PT

JUMPER LIST

DEC IN-1749 | ASCII

DEC NO.	EIA NO.	DEC NO.	EIA NO.

SEMICONDUCTOR CONVERSION CHART

	NAME	DATE
DRWN	TYLER	
CHKD		
ENG		
PROJ ENG		
PROD		

SCALE

SHEET 1 OF 1

EQUIPMENT CORPORATION

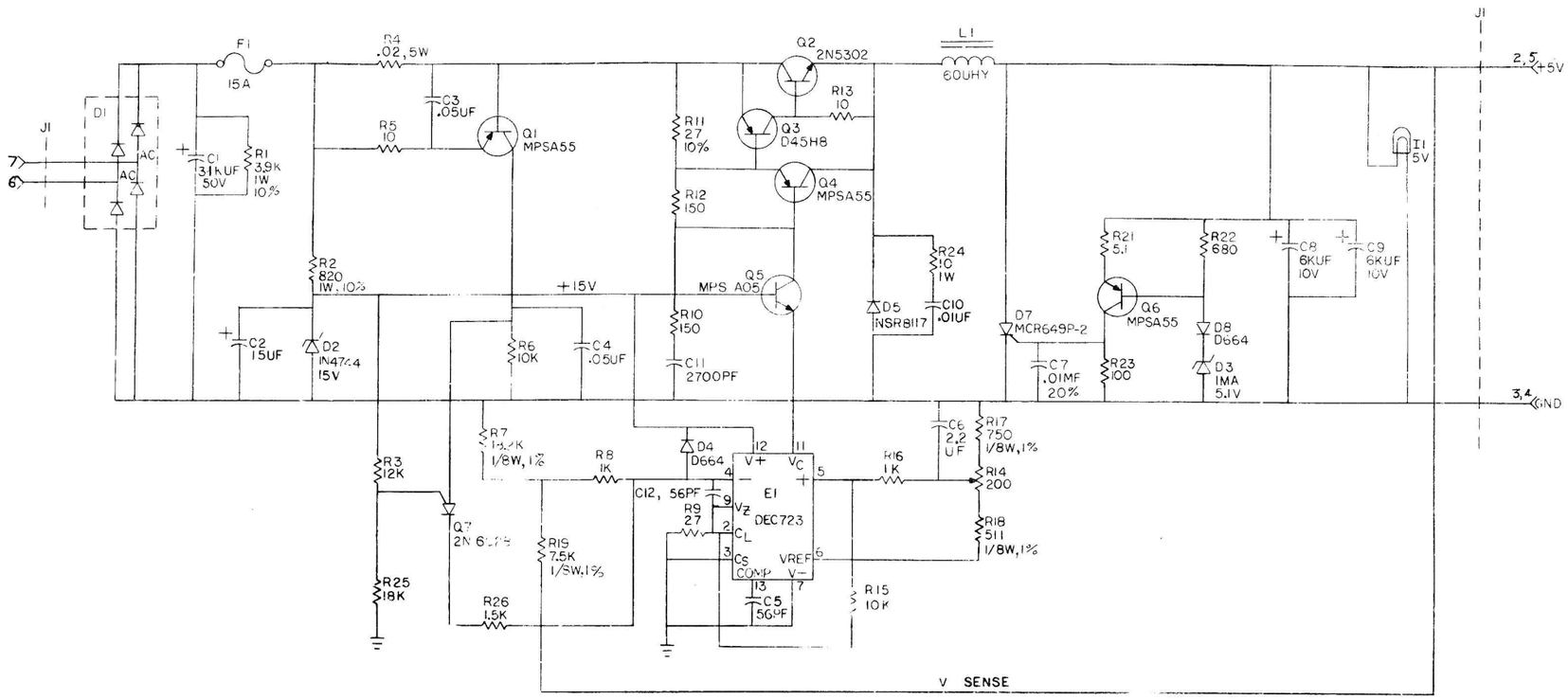
TITLE: 5V REGULATOR

SIZE A | CODE | NUMBER H744-0-0 | REV K

DIST

141

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



UNLESS OTHERWISE INDICATED:

RESISTORS ARE 1/4W, 5%

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
		PARTS LIST		
	ETCH BOARD REV	F		

REVISIONS	CHANGE NO.	CHK	REV
J.W. Lawrence 11/6/72			
J.W. LAWRENCE 10-5-72	H744-00005	G.POTTER 10/27/72	K
	H744-00004-48	G. POTTER 5/4/72	J
	H744-00003	G.POTTER 2-21-72	H
	H744-00002	G.POTTER 1-14-72	F
	H744-0000	G.POTTER 12-13-71	E

DEC NO.	EIA NO.	DEC NO.	EIA NO.
IN964A	SAME	MPSA55	
D664	IN3606	2N5302	
MCR649P-2		D45H8	
IN750A	SAME	MPSA05	
IN4744	SAME		
NSR8117			
2N6028			

SEMICONDUCTOR CONVERSION CHART

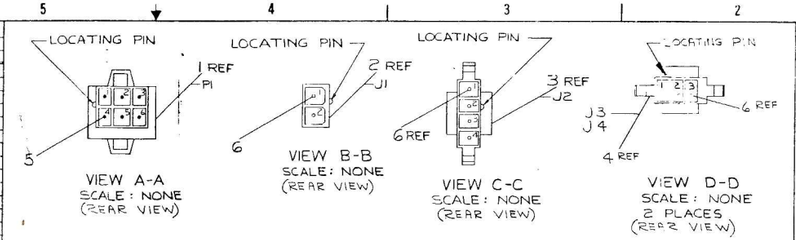
DRN. Rose V. Durette	DATE 11-3-71	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D. Darrey Howse	DATE 11-3-71	
ENG.	DATE 11/6/72	TITLE 5V REGULATOR
PROJ. MGR.	DATE 12/7/72	
PROG.	DATE 1/23/73	
NEXT HIGHER ASSY		SIZE/CO-DE D/CS NUMBER H744 -0-1 REV. K
SCALE		DIST.
SHEET 1 OF 1		

DEC FORM NO DIRD-135

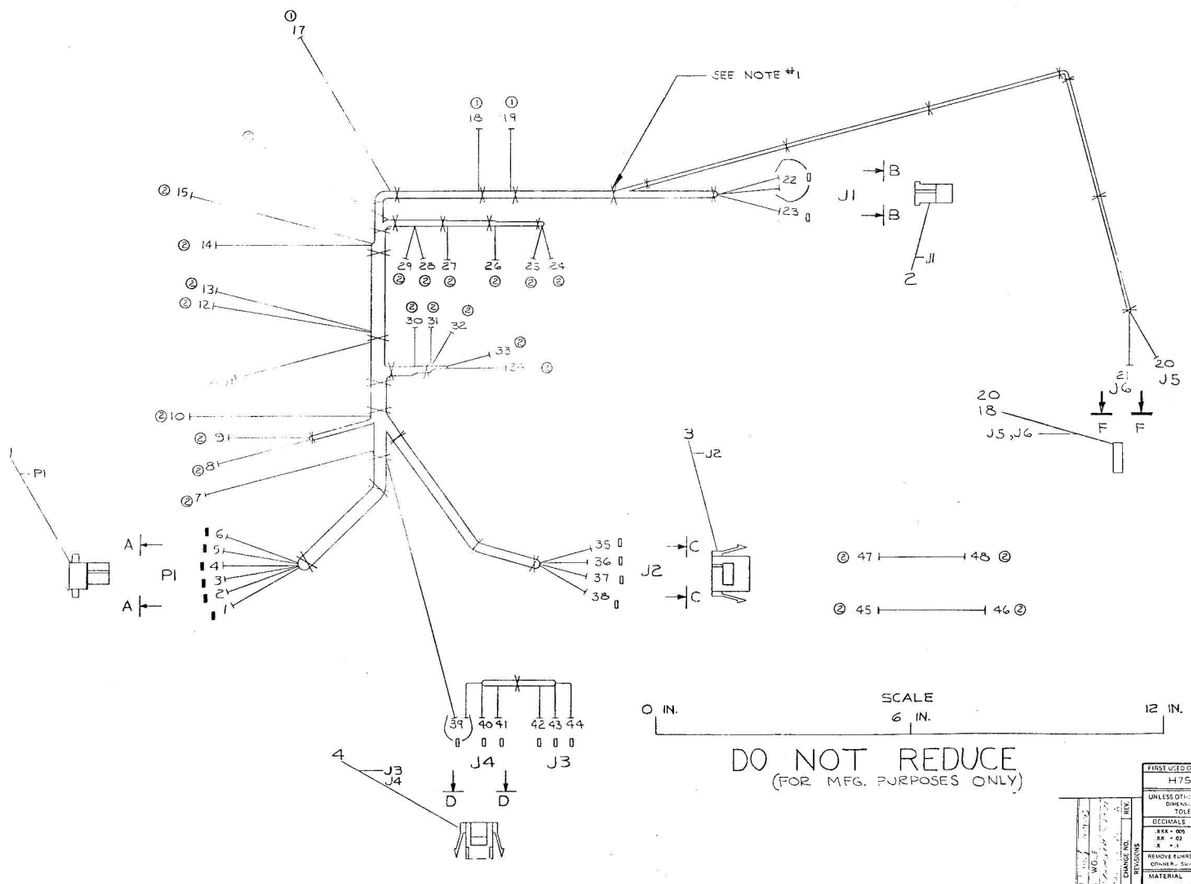
SIZE/CO-DE D/CS NUMBER H744-0-1 REV K

WIRE TABLE

ITEM NO.	WIRE DESCRIPTION AWG	COLOR	FROM POINT	FROM CONN	FROM TERM	TO POINT	TO CONN	TO TERM	WIRE LENGTH	SIGNAL
12	14	RED	1	P1-1	5	12	---	10	12	
11	"	BLK	2	P1-2	"	30	TB1-1	"	9	
14		WHT	3	P1-3		7	---		10	
12		RED	4	P1-4		32	TB1-2		9.5	
12		RED	5	P1-5	"	34	TB1-4		10.5	
14		WHT	6	P1-6	5	33	TB1-3		9.7	
12		RED	8	———	10	24	TB1-8		13.5	
14		WHT	9	———	10	26	TB1-6		12	
14		GRN	10	———	10	15	———		13.5	
13		VIO	11	———	10	19	———		9.2	
12	"	RED	13	———	10	31	TB1-2	"	7	
11	14	BLK	16	———	10	28	TB1-1	10	5.2	
15	18	BLK	17	———	9	22	J1-1	6	14	
15	18	BLK	39	———	6	42	J3-1	6	22.2	
15	18	BLK		———					3.5	
17	18 TWP	RED	18	———	9	20	———	20	23.5	
		WHT	19	TB1-6		21	J6	20	22	
19	18	BLU	23	J1-2	6	35	J2-1	6	22	
12	14	RED	25	TB1-8	10	38	J2-4	6	16	
14	14	WHT	27	TB1-3	10	37	J2-3	6	13	
11	14	BLK	29	TB1-1	10	36	J2-2	6	13	
15	18	BLK	40	J4-2	6	43	J3-2	6	3.5	
15	18	BLK	41	J4-3	6	44	J3-3	6	3.5	
12	14	RED	45	TB1-4	10	46	TB1-7	10	2.5	
14	14	WHT	47	TB1-3	10	48	TB1-5	10	2.0	



NOTES:
1. USE TIE WRAPS (X) (ITEM #16) APPROXIMATELY EVERY THREE (3) INCHES WHEN NECESSARY AND AT BREAKOUT POINTS.



DO NOT REDUCE
(FOR MFG. PURPOSES ONLY)

SYM	QTY	DESCRIPTION	PART NO	ITEM NO
	2	MINI-FASTAB3, #60291-1	1210320-2	20
	A/R	WIRE, #18 AWG STRD, BLU	9107360-66	19
	2	HOUSING, 1-480417-0	1210320-1	18
	A/R	WIRE, #18 AWG STRD TWP RED/BLK	9107430-29	17
X	A/R	TIE WRAP, PANDUIT, #SSTIM	9007031	16
	A/R	WIRE, #18 STRD, BLK	9107360-00	15
	A/R	WIRE, #14 STRD, WHT	9107370-99	14
	A/R	WIRE, #14 STRD, VIO	9107370-77	13
	A/R	WIRE, #14 STRD, RED	9107370-22	12
	A/R	WIRE, #14 STRD, BLK	9107370-00	11
②	2.5	CONN, SOLDERLESS, ARKLESS #9332	9007910	10
①	3	CONN, SOLDERLESS, ARKLESS #9362	9007917	9
	32	TERM, LUG, OFFSET, AMP #62145-1	9007112	8
	1	TERM, BLOCK, CINCH #3-540	9006909	7
▯	12	SOCKET TERM CONTACT (FEMALE)	1209373-01	6
▮	6	PIN CONTACT (MALE)	1209378-01	5
	2	CONN, MATE-N-LOCK 3 PIN	1209350-03	4
	1	CONN, MATE-N-LOCK 4 PIN	1209350-04	3
	1	CONN, MATE-N-LOCK 2 PIN	1209321-02	2
	1	CONN, MATE-N-LOCK 6 PIN	1209351-06	1

PARTS LIST

FIRST USED ON OPTION MODEL	H750	
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES TOLERANCES	DRWN.	DATE
	CHK'D.	DATE
DECIMALS XXX ± .005, XX ± .02, X ± .1	ANGLES ±0°30'	ENGR.
	PROJ ENG.	DATE
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE ROUGHNESS	PROG.	DATE
MATERIAL	NEXT HIGHER ASSY.	
SEE PART'S LIST	E-UA-H750-2-K	
FINISH	SCALE 1/1	
	SHEET 1 OF 1	

REVISIONS: REV. | CHANGE NO. | W.O. | DATE | CHK.

E-UA7002207-0-0 A

EQUIPMENT CORPORATION

TITLE: H750 POWER SUPPLY HARNESS

SIZE E | CODE | NUMBER 7002207-0-0 | REV. A

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

DRAWING DIRECTORY

CUSTOMER PRINT SET INDEX

SEQUENCE	SEQUENCE
DWG. DIRECTORY	B-DD-BCØ5-Ø
LINE SET 115V	C-UA-BCØ5H-Ø-Ø
LINE SET 230V	C-UA-BCØ5J-Ø-Ø
A.C INPUT BOX	D-UA-H4ØØ-Ø-Ø
A.C INPUT BOX (P.L)	A-PL-H4ØØ-Ø-Ø
PWR CONTROL BD. 115V	C-1A-5409824-Ø-Ø
PWR CONTROL BD. 230V	C-1A-5409825-Ø-Ø

THIS IS PRINT SET

UNIT VARIATIONS

VARIATION	TITLE	PRINT SET TYPE: BCØ5H-1
BCØ5H	LINE SET 115VAC 7 AMP	X
BCØ5J	LINE SET 230VAC 5 AMP	X

REVISIONS

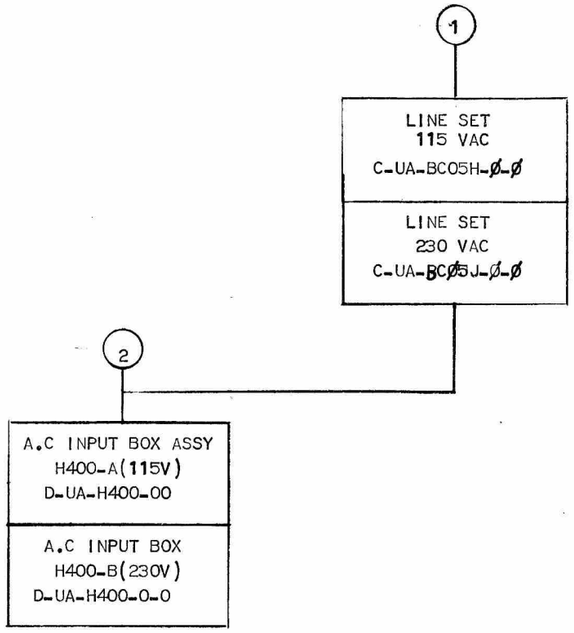
REV	CHG. NO.	DATE

USED ON OPTION/MODEL	
11/Ø7	

DRN. D. FONTAINE	DATE 4/5/72	TITLE: LINE SET
CHK'D	DATE 4-15-72	
PROJ ENG.	DATE 4-18-72	
PROD.	DATE 5/1/72	SIZE B; CODE DD; NUMBER BCØ5H-Ø; REV
FIELD SERV.	DATE	
SHEET 1 OF 3		DIST

DRB 106

DEC 16-(325)-1062-1-N871



TITLE		SIZE	CODE	NUMBER	REV
LINE SET	SHEET 2 OF 3	B	DD	BCØ5H-Ø	

CUSTOMER PRINT SET BCØ5H-1	MFG SET	ELECTRICAL FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO.
X		2.	C-IA-5409824-0-0		1	POWER CONTROL BD 115V	H400
X			C-IA-5409825-0-0		1	POWER CONTROL BD 230V	H400

CUSTOMER PRINT SET BCØ5H-1	MFG SET	MECHANICAL FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO.
X		1.	C-UA-BCØ5H-Ø-Ø		1	LINE SET 115V 7 AMP	BCØ5H
X			C-UA-BCØ5J-Ø-Ø		1	LINE SET 230V 5 AMP	BCØ5J
X		2.	D-UA-H4ØØ-Ø-Ø		1	AC INPUT BOX	H4ØØ
X			A-PL-H4ØØ-Ø-Ø		1	A.C INPUT BOX PARTS LIST	H4ØØ
			D-IA-5309845-0-0		1	BOX	H4ØØ
			C-MD-5309849-0-0		1	COVER	H4ØØ
			A-DC-5309899-0-0		1	PWR CONTROL DECAL 115V	H4ØØ
			A-DC-5309900-0-C		1	PWR CONTROL DECAL 230V	H4ØØ

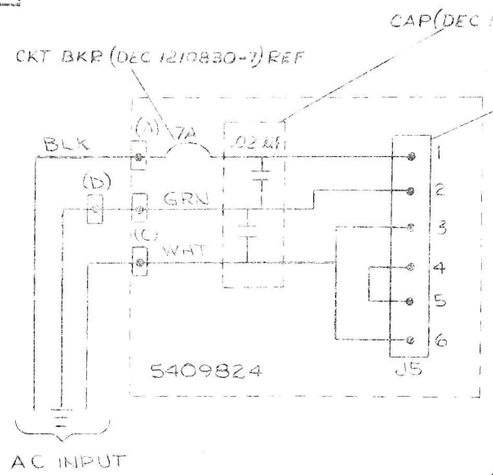
TITLE	SHEET 3 OF 3	SIZE	CODE	NUMBER
LINE SET		B	DD	BCØ5H-Ø

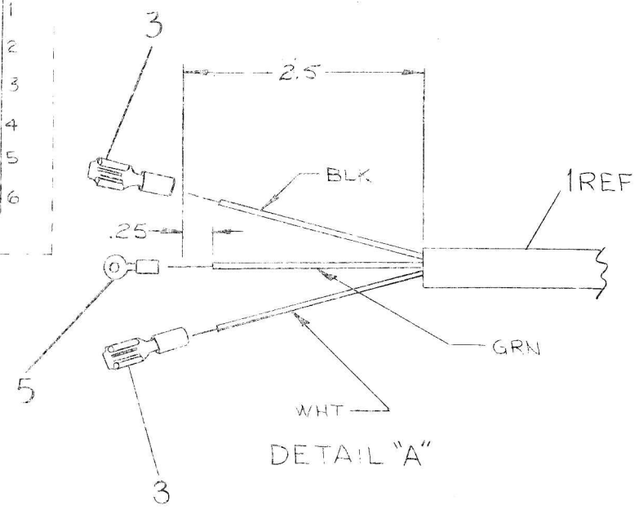
146

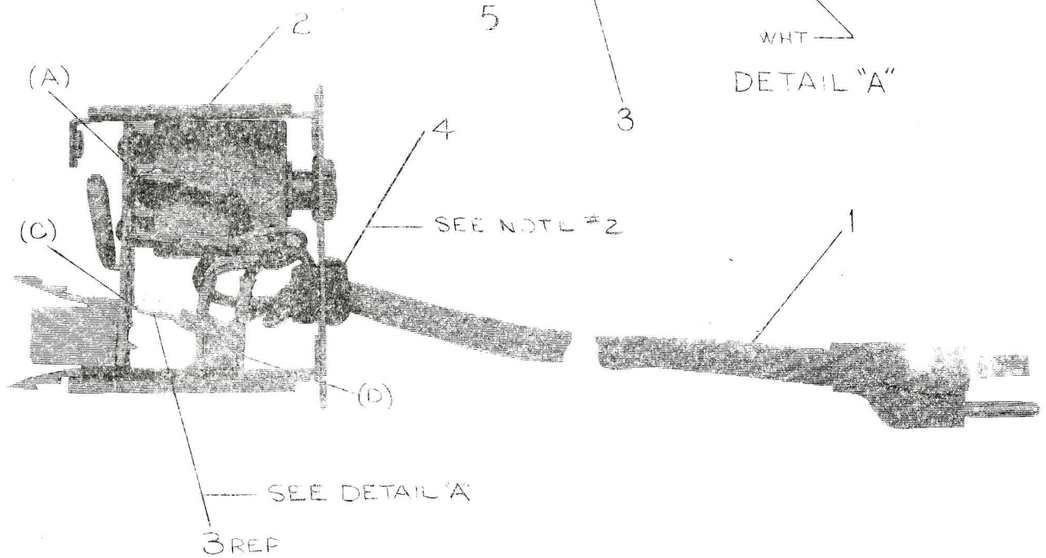
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

NOTES:

1. [illegible] AND ITEM #2 [illegible] SCHEMATIC.
2. FOR INSTALLATION [illegible] STRAIN RELIEF [illegible]







SHOWN WITHOUT COVER

ITEM NO	PART NO	DESCRIPTION	QTY.
		PARTS LIST	
5	9007929-0	SOLDER CONN ARKLESS	1
4	SR-6N3-1 [illegible]	STRAIN RELIEF SR-6N3-1	1
3	9007919	SOLDERLESS CONN. ARKLESS	2
2	D-UA-H400 0-0	AC INPUT BOX H400A	1
1	17-00015-6	POWER CORD 120V	1

REVISIONS	CHK	CHANGE NO.	REV.
31-Jan-72	R.WOLFF	BC05H-00001	A
4-Feb-72	R.WOLFF	BCC5H-00002	B
5-Jun-72	DEMORANVILLE	H400-00002	C
5-25-72	R.BURTON	BC05H-00003	E
4-Jan-72	R. BURTON		

FIRST USED ON OPTION/MODEL	11/05
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES	
DECIMALS: XXX = .005, XX = .02, X = .1	ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓	
MATERIAL	
FINISH	

DRN. T. Guillin	DATE 12-27-71	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D [illegible]	DATE 1-4-72	
ENG. David DeMoranville	DATE 1-4-72	
PROJ ENG. Ronald Hwang	DATE 1-7-72	
PROD R.K. Peterson	DATE 1/21/72	
NEXT HIGHER ASSY.		
SCALE		
SHEET 1 OF 1		

TITLE: LINE SET 115VAC 7AMP

SIZE C | CODE UA | NUMBER BC05H-0-0 | REV

DIST.

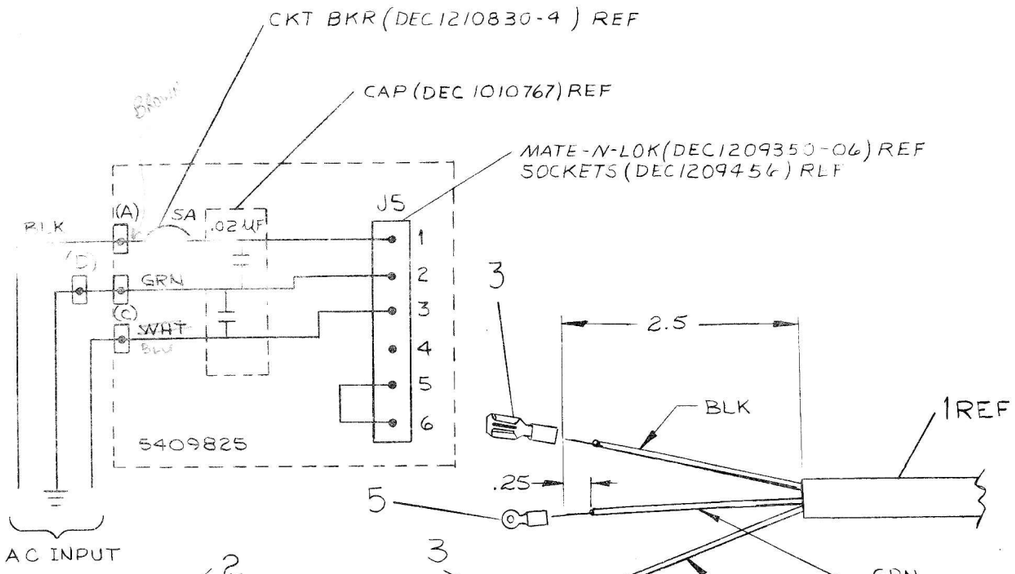
REV. D | SHEET | CODE UA | NUMBER BC05H-0-0

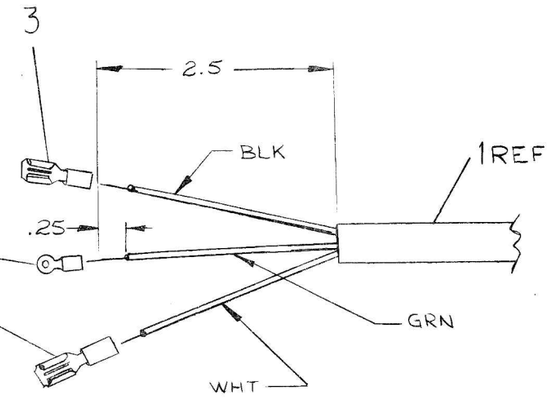
DEC FORM NO. GBC 308-A

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission. 1972

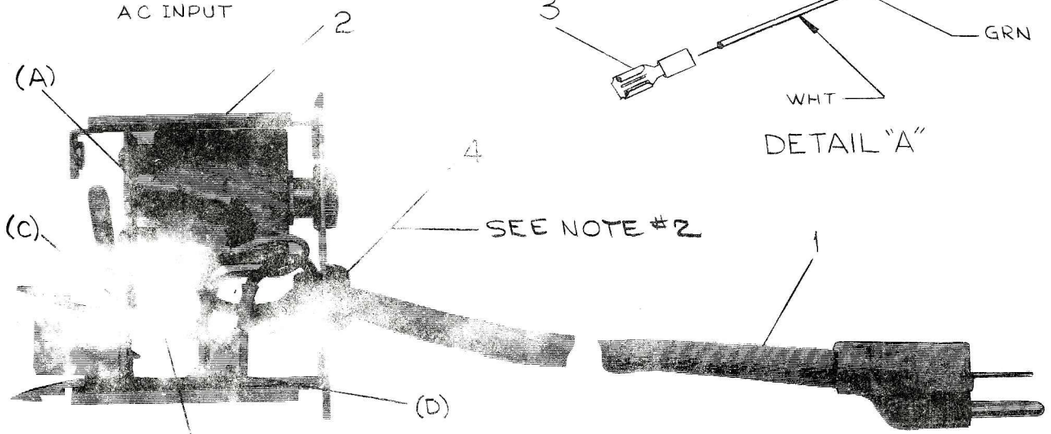
NOTES:

1. CONNECT ITEM #1 (POWER CORD) AND ITEM #2 (AC INPUT) PER CIRCUIT SCHEMATIC.
2. FOR INSTALLATION USE HAYCO #29 STRAIN RELIEF PLIERS.





DETAIL "A"



SHOWN WITHOUT COVER

REVISIONS			
CHK	CHANGE NO.	REV.	
	BC05J-00001	A	
	H400-0002	B	
	BC05J-00002	C	
	BC05J-00003	D	

ITEM NO.	PART NO.	DESCRIPTION	QTY.
5	9007929-0	SOLDER CONN ARKLESS	1
4	9008492-2	GROMMET HEYCO SR-6N3-4	1
3	9007919	SOLDER CONN ARKLESS	2
2	D-UA-H400-0-0	AC INPUT BOX H400B	1
1	1700016-6	POWER CORD 240V	1

PARTS LIST

FIRST USED ON OPTION/MODEL	
11/05	

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL

FINISH

		DATE
DRN.	T. Guillen	12-27-71
CHK'D	J. Fontaine	1-4-72
ENG.	David DeMarinville	1-4-72
PROJ ENG.	Randall Hardy	1-7-72
PROD.	P.K. Peterson	1/7/72

NEXT HIGHER ASSY.

SCALE

SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE

LINE SET

230V AC 4 AMP

SIZE	CODE	NUMBER	REV.
C	UA	BC05J-0-0	D

DIST.

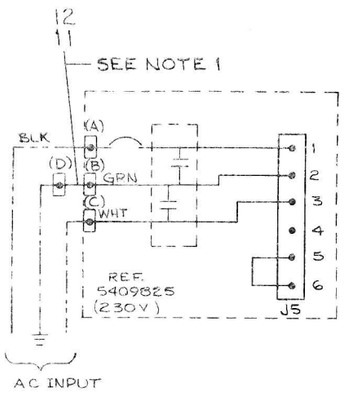
DEC FORM NO. DRC 100-A

148

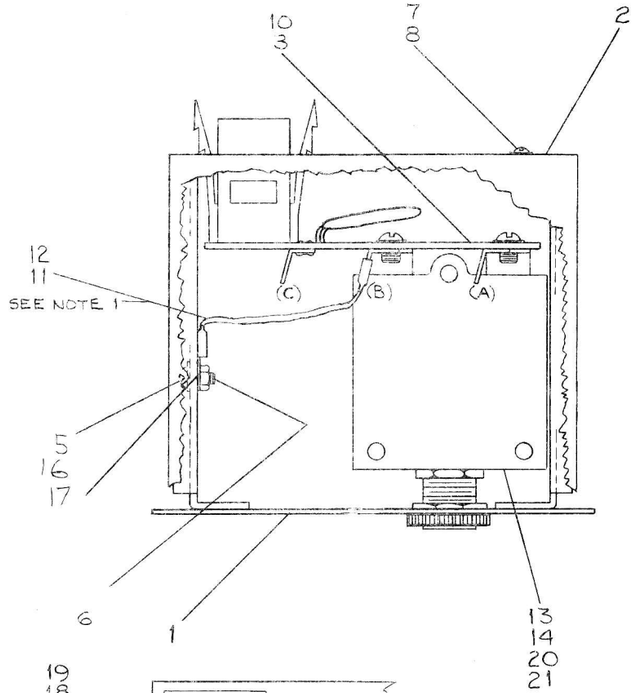
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission. 1972

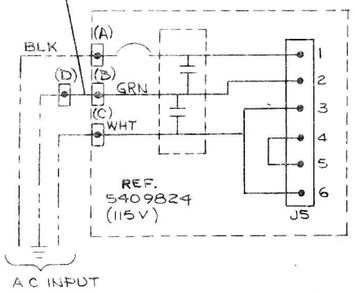
LEGEND		
NUMBER	VARIATION	USED ON
H400-A	115 VAC 7AMP	BCØ5H
H400-B	230 VAC 4AMP	BCG
H400-C	115 VAC 10AMP	BCØ5T
H400-D	230 VAC 5AMP	BCØ5U

NOTES:
1. ITEM #11 (WIRE) AND TWO OF ITEM #12 (SPADE TAB'S) ARE TO BE CONNECTED TO POINT B.

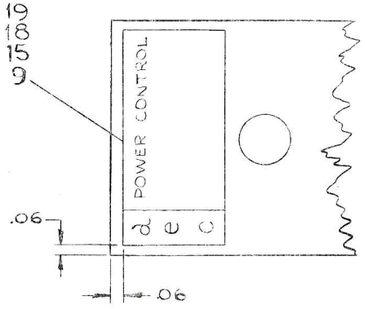


SEE LEGEND





SEE LEGEND



REVISIONS				
CHK	CHANGE NO	REV		
	H400-00002	A	R. BURTON	2-22-72
	H400-00003	B	R. BURTON	5-31-72
	H400-00004	C	R. BURTON	12-2-72
	H400-00005	D	R. BURTON	12-13-72
	H400-00006	E	R. BURTON	1-18-73
	H400-00007	F	R. BURTON	2-8-73
			R. BURTON	6-19-73
			R. BURTON	6-21-73

DEC FORM NO
ORD 100-A

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
D-UA-BCØ5H-Ø-Ø		PARTS LIST		
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES	DRN T	DATE	DIGITAL EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS: .XXX ± .005, .XX ± .02, .X ± .1 — ANGLES: ± 0° 30'	CHKD	DATE		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓	ENG	DATE	TITLE: AC INPUT BOX ASSY	
MATERIAL	PROJ ENG	DATE		
FINISH	PROD	DATE		
	NEXT HIGHER ASSY		SIZE D	CODE UA
	D-UA-BCØ5H-Ø-Ø		SCALE	NUMBER H400-Ø-Ø
			SHEET	REV E

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY TYRONE QUILLIN	CHECKED [illegible]	SECTION 1
DATE 12-1-71	DATE 1-4-72	
ENG David [illegible]	PROD R.K. Peterson	ISSUED SECT. 1
DATE 1-4-72	DATE 1/7/72	

ITEM NO.	DWG NO./PART NO.	DESCRIPTION	QUANTITY/VARIATION H400-A (115V)	H400-B (230V)	H400 C (115V)	H400 D (230V)
1	D-IA-5309845-0-0	BOX	1	1		
2	C-MD-5309849-0-0	COVER	1	1		
3	C-IA-5409825-0-0	POWER CONTROL BOAPD (230V)	-	1	-	
4	~~9007113~~	~~DOUBLE FASTAB~~	~~1~~	~~1~~	-	-
5	9006011-1	SCR PHL PAN HD #4-40 x 3/8 LG	1	1		
6	9006557	KEP NUT [illegible] HD #4-40	1	1		
7	9006633	WASHER [illegible] #6	1	1		
8	9006020-1	SCR PHL PAN HD #6-32 x ⅛ LG	1	1		
9	A-DC-5309899-0-0	PWR CONTROL DECAL 115V	1	-	-	-
10	C-IA-5409824-0-0	POWER CONTROL BOARD (115V)	1	-		-
11	9107360-55	#18 AWG STRD ~~TEF INS~~ [illegible] 3 IN.LG)	1	1		
12	9007917	FASTON TABS	1	1		
13	1210830-4	CRK BREAKER (WOOD 4 AMP)	-	1	-	-
14	1210830-7	CRK BREAKER (WOOD 7 AMP)	1	-	-	-
15	A-DC-5309900-0-0	PWR CONTROL DECAL (230V)	-	1	-	-
16	9006632	WASHER #4 INTERNAL TOOTH	1	1		
17	9007929-01	CRIMP-ON EYELET	1	1		
18	A-DC-7410727-0-0	PWR CONT DECAL	-	-		-
19	A-DC-7410726-0-0	PWR CONT DECAL	-	-	-	
20	1210830-5	CKT BREAKER (WOOD 5 AMP)	-	-	-	
21	1210830-10	CKT BREAKER (WOOD 10 AMP)	-	-		-

TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO.
AC INPUT BOX ASS'Y	D-UA-H4ØØ-Ø-Ø	A	PL	H4ØØ-Ø-Ø	E	H400-00007
	SHEET 1 OF 1	DIST.				

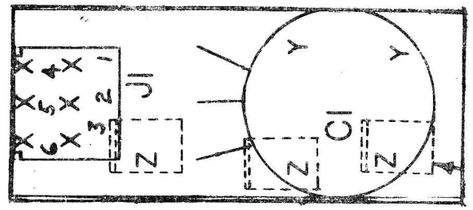
DEC FORM DEC 16-(325) 1031 N870
DRA 110

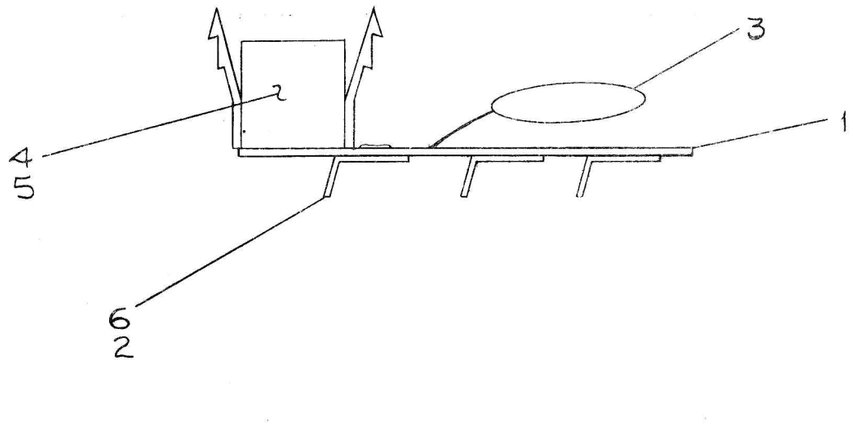
150

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

NOTES:

1. FOR CIRCUIT SCHEMATIC REFER TO DWG D-UA-H4ØØ-Ø-Ø
2. ETCHED BOARD #5009821 MUST BE U.L. APPROVED. MANUFACTURER'S U.L. NUMBER LOCATION IS SHOWN ON AH DRAWING.





QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
		ASSY/DRILLING HOLE LAYOUT	D-AH-5409824-05	REF
3		FASTON TAB	9003219	6
6		P.C. SOCKETS FEMALE	1209456	5
1	J1	MATE-N-LOCK 6-PIN	1209350-06	4
1	C1	CAP INPUT .02 M F	1010767	3
3		EYELET # GS4-5	9009000	2
		ETCHED CIRCUIT B D	5009821	1
		MODULE ECO HISTORY	B-MH-5409824-0-6	REF
		X-Y COORDINATE HOLE LOCATION	K-CO-5409824-0-0	REF

PARTS LIST

FIRST USED ON OPTION/MODEL: H4ØØ A

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

FINISH —

		DATE
DRN. T. Guillen		12-8-71
CHK'D. D'Antonio		1-9-72
ENG. David De Moss		1-4-72
PROJ. ENG. Richard Hardy		1-6-72
PROD. R.K. Peterson		1/7/72

NEXT HIGHER ASSY. C-UA-H4ØØ-Ø-Ø

SCALE —

SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: POWER CONTROL BOARD (115V)

SIZE	CODE	NUMBER	REV.
C	IA	5409824-0-0	B

DIST.

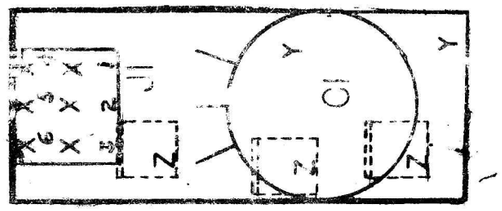
REVISIONS			
CHK	CHANGE NO.	REV.	
[illegible]	5409824-0000	A	
Bl Rank 2-1-72			
R. WOLFF			
Richard Hardy 2-2-72			
[illegible]	5409824-00002	B	
Richard 5/22/72			
R. BURTON			
R. Burton [illegible]			

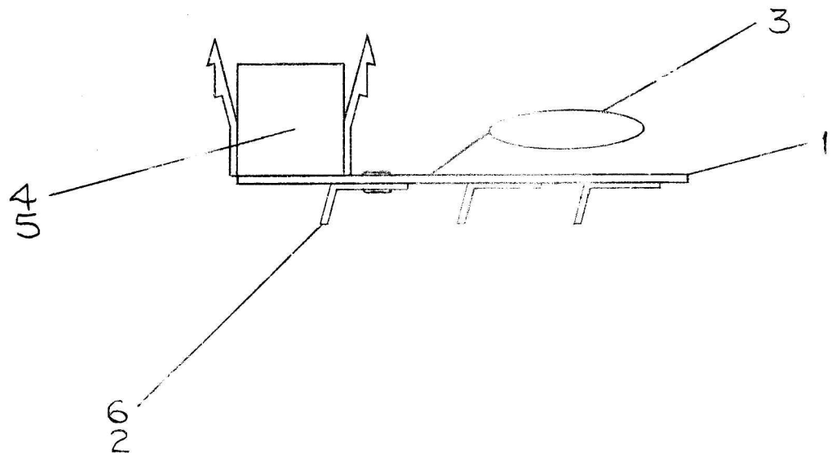
DEC FORM NO. DRC 100-A

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

NOTES:

1. FOR CIRCUIT SCHEMATIC REFER TO DWG D-UA-H400-0-0.
2. ETCHED BOARD # 5009822 MUST BE U.L. APPROVED. MANUFACTURER'S U.L. NUMBER LOCATION IS SHOWN ON AH DRAWING.





QTY.	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
		ASSY/DRILLING HOLE LAYOUT	D-AH-5409825-0-5	REF
3		FASTON TAB	9008219	6
6		P.C. SOCKETS MALE	1209456	5
1	J1	6-PIN MATE-N-LOCK	1209350-06	4
1	C1	CAP. INPUT .02 μF	1010767	3
3		EYELET #654-5	9009000	2
1		ETCHED CIRCUIT BOARD	5009822	1
		MODULE ECO HISTORY	B-MH-5409825-0-6	REF
		X-Y COORDINATE HOLE LOCATION	K-CO-5409825-0-4	REF

PARTS LIST

FIRST USED ON OPTION/MODEL: H400B

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —/—

FINISH —/—

		DATE
DRN. T. Gulbin		12-9-71
CHK'D. L. Fontana		DATE 1-4-72
ENG. Gerald DeMonsabert		DATE 1-4-72
PROJ. ENG. Ronald Lindsay		DATE 1-7-72
PROD. R. K. Peterson		DATE 1/7/72

NEXT HIGHER ASSY. C-UA-H400-0-0

SCALE —/—

SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: POWER CONTROL BOARD (230V)

SIZE	CODE	NUMBER	REV.
C	IA	5409825-0-0	A

DIST.

REVISIONS			
	CHANGE NO.	CHK	REV.
	5409825-00001	LJF	A
R. WOLFF 8-2-72			

DEC FORM NO. 100-A

SIZE C | CODE IA | NUMBER 5409825-0-0 | REV. A

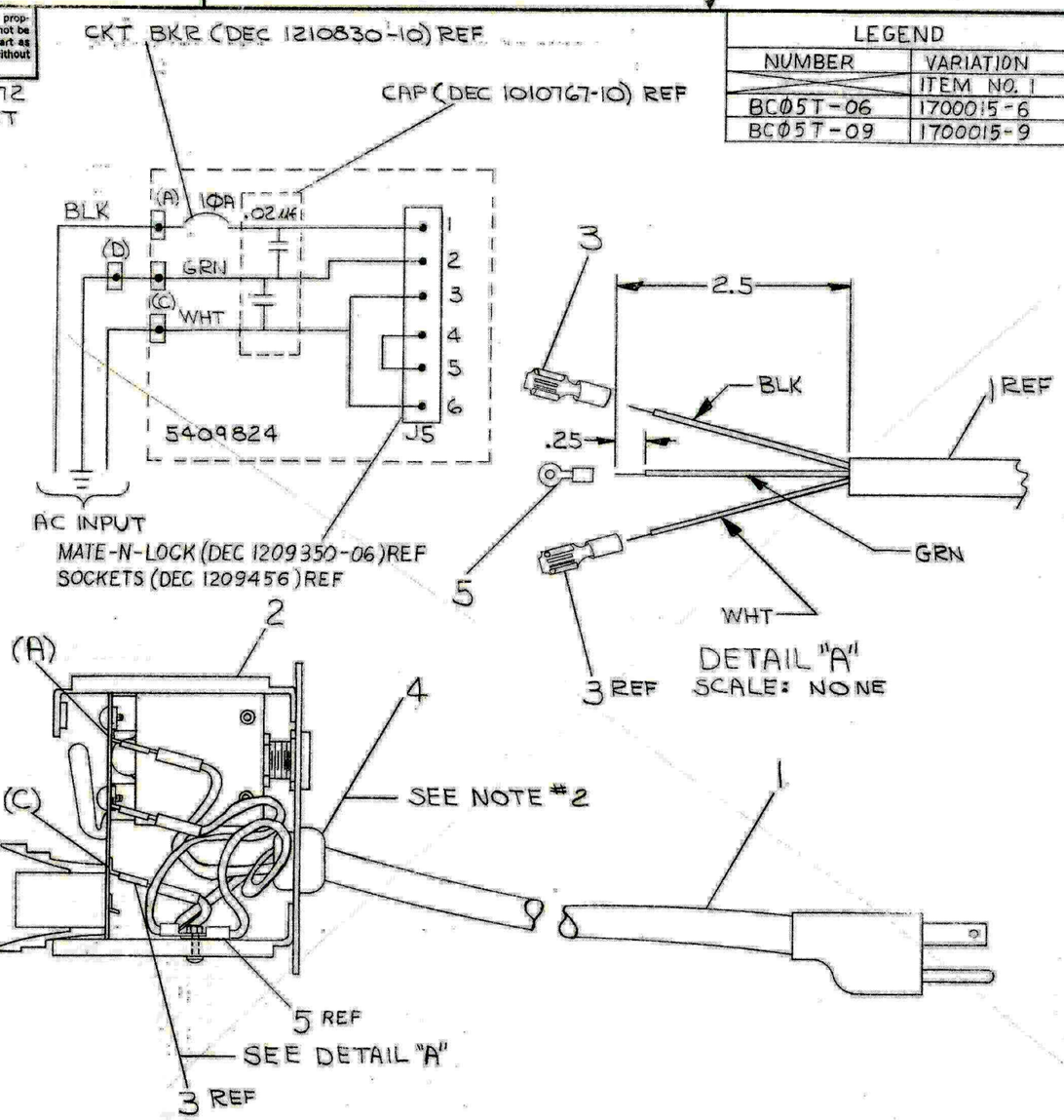
52

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

COPYRIGHT © 1972
DIGITAL EQUIPMENT
CORPORATION

LEGEND	
NUMBER	VARIATION
	ITEM NO. 1
BC05T-06	1700015-6
BC05T-09	1700015-9

NOTES:
1. CONNECT ITEM #1 (AC INPUT BOX) PER CIRCUIT SCHEMATIC.
2. FOR INSTALLATION USE HEYCO #29 STRAIN RELIEF PLIERS.



ITEM NO.	QTY.	DESCRIPTION	PART NO.
5	1	SOLDER CONN	
4	1	STRAIN RELIEF	
3	2	SOLDERLESS CONN	
2	1	A.C. INPUT BOX	
1	1	POWER CORD 120V	SEE LEGEND

FIRST USED ON OPTION/MODEL: 11/35

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

FINISH —

	NAME	DATE
DRN.	K. Davis	11-21-72
CHK'D.	Peter Cahill	12-5-72
ENG.	C.R. Blasi	1-16-73
PROJ. ENG.	C.R. Blasi	1-16-73
PROD.	C.F. Stringer	2-21-73

NEXT HIGHER ASSY. E-AD-BAII-D-0

SCALE NONE

SHEET 1 OF 1

TITLE: [illegible]

SIZE C | CODE IDENT NO. [illegible] | DWG NO. BC05T-0-0 | REV B

REVISIONS	CHANGE NO.	REV.	CHK	
	BC05T-00001	A	gm	4-6-73
C. BLASI				
	BC05T-00002	B	gm	6-11-73
C. BLASI				

BRUNING 40-107 15968

DEC FORM NO. 1187 BBB-A

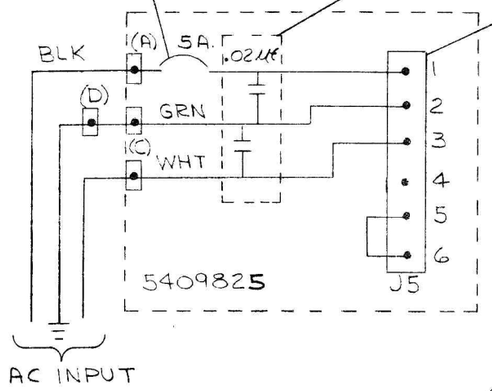
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

COPYRIGHT © 1972
DIGITAL EQUIPMENT
CORPORATION

CKT HDR (DEC 1210830-5) REF

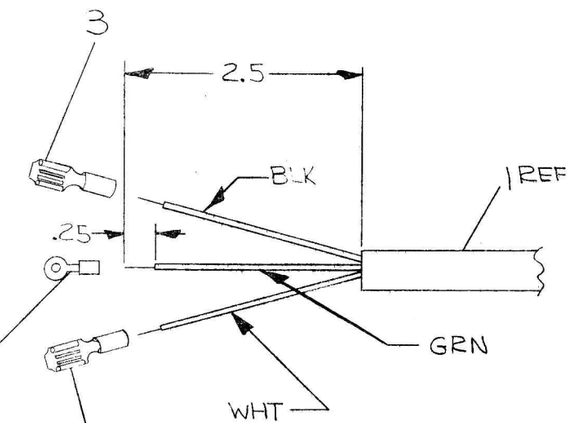
CAP (DEC 1010767-10) REF

MATE-N-LOCK (DEC 1209350-06) REF
SOCKETS (DEC 1209456) REF

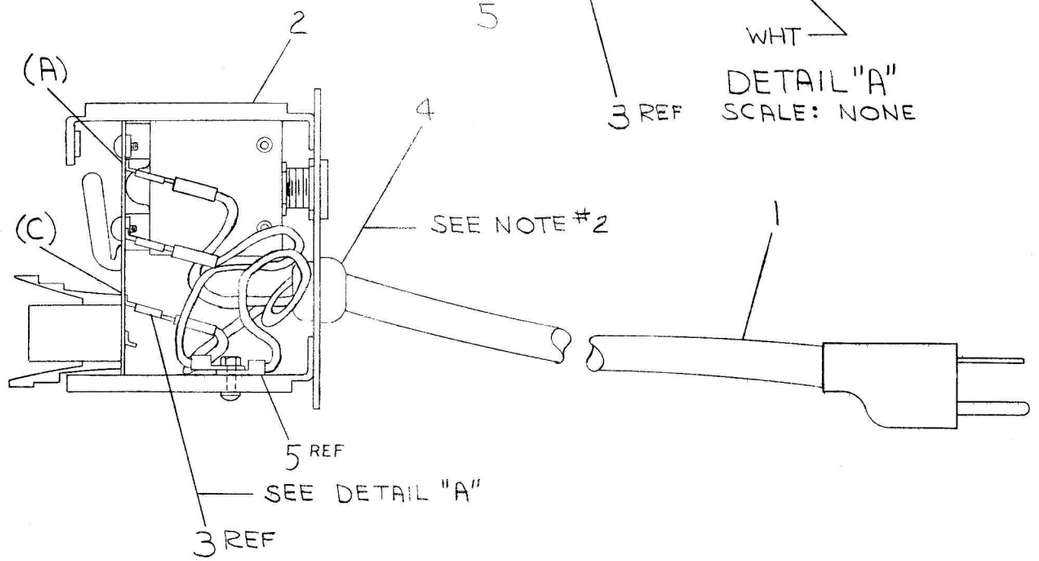


LEGEND	
NUMBER	VARIATION
	ITEM NO. 1
BC05U-06	1700016-6
BC05U-09	1700016-9

NOTES:
1. CONNECT ITEM #1 (POWER CORD) AND ITEM #2 (AC INPUT BOX) PER CIRCUIT SCHEMATIC.
2. FOR INSTALLATION USE HEYCO #29 STRAIN RELIEF PLIERS.



DETAIL "A"
SCALE: NONE



SHOWN WITHOUT COVER

QTY.	DESCRIPTION	PART NO.	ITEM NO.
1	SOLDER CONN.	9007927-0	5
1	STRAIN RELIEF 6N3-4	9008492-2	4
2	SOLDER CONN.	9007917	3
1	AC. INPUT BOX H4ØØD	H4ØØ-D	2
1	POWER CORD 240V	SEE LEGEND	1

PARTS LIST

REVISIONS			
CHK	CHANGE NO.	REV.	
BM	BC05U-00001	A	4-6-73 C. BLASI
BM	BC/5U- 2	B	4-13-72 C. BLASI
	Ernie L		6-12-72 C. BLASI

FIRST USED ON OPTION/MODEL	
11/35	

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —/—

FINISH —/—

DRN. K. Davis	DATE 11-21-72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D	DATE	
ENG. K.B. Clair	DATE 12-6-72	
PROJ. ENG. K.B. Blasi	DATE 12-6-72	
PROD.	DATE 2-21-73	

TITLE
LINE SET
230V A.C. 5 AMP

NEXT HIGHER ASSY.
E-AD-BA11-D-Ø

SCALE NONE
SHEET 1 OF 1

SIZE	CODE	NUMBER	REV
C	UA	BCØ5U-Ø-Ø	B

DIST.

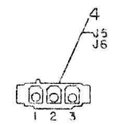
REV. B
NUMBER BCØ5U-Ø-Ø
SIZE C CODE UA

BRUNING 40-107 15968
DEC FORM NO. 1BRC 100-A

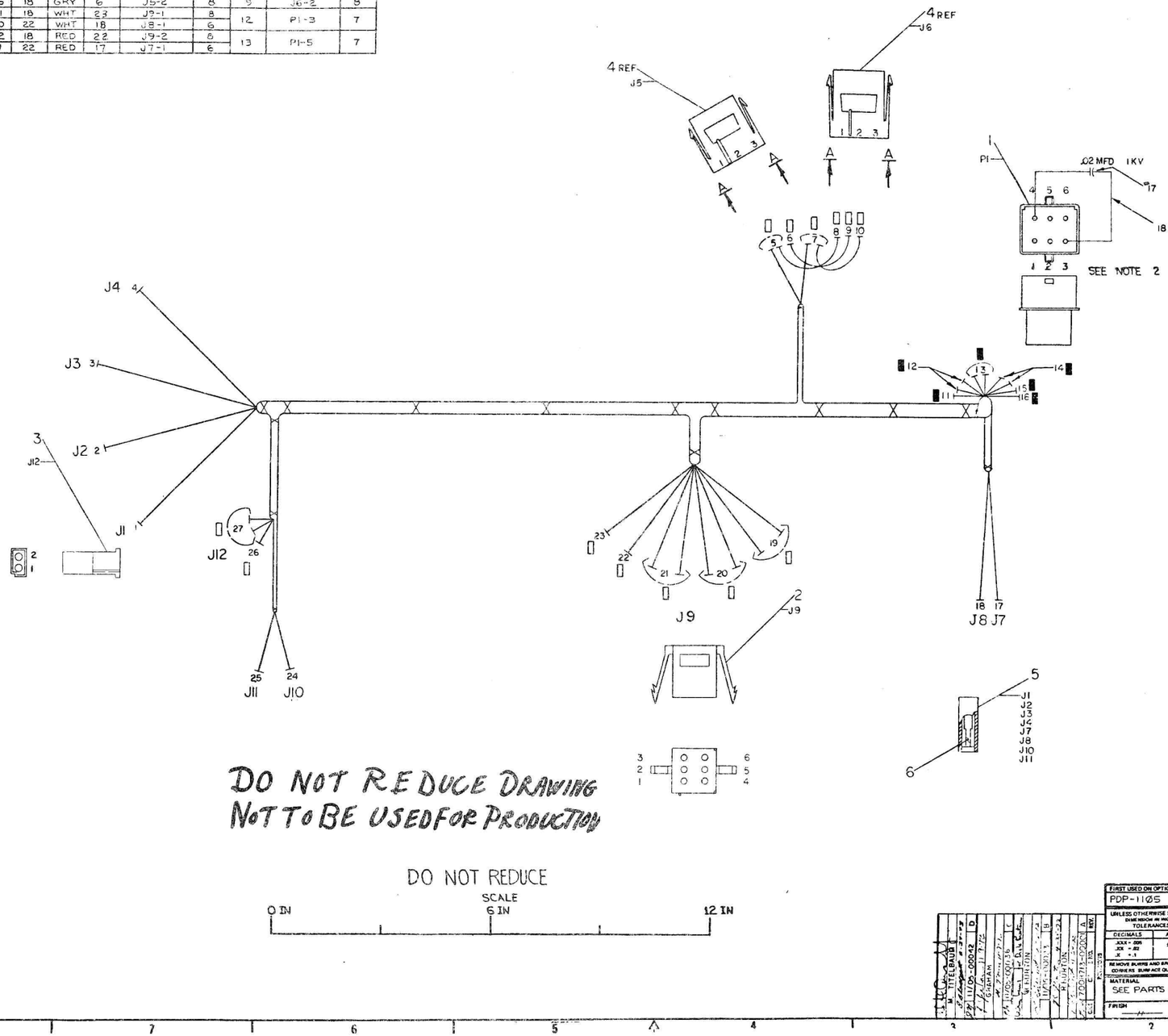
WIRE TABLE

ITEM NO.	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONNECTION	FROM TERM	TO POINT	TO CONNECTION	TO TERM
9	22	RED	24	J10-1	6	19	J9-3	8
12	18	RED	1	P1-6	7			
9	22	RED	25	J11-1	6	27	J12-2	8
12	18	RED	20	J9-4	8	16	P1-4	7
12	18	RED	26	J12-1	8	1	J1-1	6
12	18	RED	2	J2-1	6	15	P1-1	7
13	18	VIO	3	J3-1	6	5	J5-1	8
13	18	VIO	8	J6-1	8			
14	18	BLK	4	J4-1	6	21	J9-5	8
14	18	BLK	14	P1-2	7	7	J5-3	8
14	18	BLK	10	J6-3	8			
15	18	GRY	6	J5-2	8	9	J6-2	8
11	18	WHT	23	J9-1	8	12	P1-3	7
10	22	WHT	18	J8-1	6			
12	18	RED	22	J9-2	8	13	P1-5	7
9	22	RED	17	J7-1	6			

NOTES:
1. USE TIE WRAPS (ITEM #16) APPROXIMATELY EVERY THREE INCHES WHEN NECESSARY AND AT EVERY BREAKOUT POINT.
2. CAPACITOR SHOULD BE CRIMPED TOGETHER WITH PART 12 @ 16. LEADS SHOULD BE INSULATED AND NOT LONGER THAN 1 INCH.



VIEW A-A
SCALE: NONE



DO NOT REDUCE DRAWING
NOT TO BE USED FOR PRODUCTION

DO NOT REDUCE
SCALE
0 IN 6 IN 12 IN

ITEM	QTY.	DESCRIPTION	PART NO.
	A/R	TEFLON TUBING	9107278-01
	1	CAP .02 μF 1000V 20%	10-1076*
X	A/R	TIE WRAP, SSTI-M, PANDUIT	900703
	A/R	WIRE, #18 AWG GRY	9107360-88
	A/R	WIRE, #18 AWG BLK	9107360-00
	A/R	WIRE, #18 AWG VIO	9107360-77
	A/R	WIRE, #18 AWG RED	9107360-22
	A/R	WIRE, #18 AWG WHT	9107360-99
	A/R	WIRE, #22 AWG WHT	9107350-99
	A/R	WIRE, #22 AWG RED	9107350-22
	18	SOCKET, TERM. CONTACT	1209379-01
	6	PIN, TERM. CONTACT	1209378-01
	8	MINI-FASTABS #60291-1	1210820-2
	8	HOUSING, 1-480417-0	1210820-1
	2	CONN, MATE-N-LOK, 3 PIN	1209350-03
	1	CONN, MATE-N-LOK, 2 PIN	1210821-2
	1	CONN, MATE-N-LOK, 6 PIN	1209350-06
	1	CONN., MATE-N-LOK, 4 PIN	1209351-04

FIRST USED ON OPTION/MODEL: PDP-1105
PARTS LIST

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES: DECIMALS .XXX ± .005, .XX ± .02, .X ± .1; ANGLES ±0° 30'. REMOVE BURRS AND BREAK SHARP CORNERS. BURR ACT QUALITY.

MATERIAL: SEE PARTS LIST
FINISH:

DRN. DATE 4-22-72
CHK'D DATE 4-24-72
ENG DATE 4-25-72
DATE
DATE

DIGITAL EQUIPMENT CORPORATION

TITLE: AC INPUT HARNESS (PDP1105)

NEXT ASSY. USED ON
D-UA-1125-0-0

SIZE E | CODE TA | NUMBER 7008713-0-0 | REV. C

SCALE 1/1
SHEET 1 OF 1
DIST.

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	ECO 1105-00042	4-25-72	
B	ECO 1105-00053	5-16-72	
C	ECO 1105-00060	6-1-72	
D	ECO 1105-00062	6-5-72	

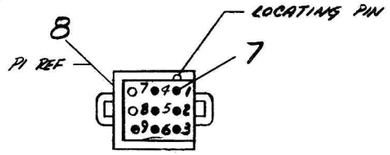
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

WIRE TABLE

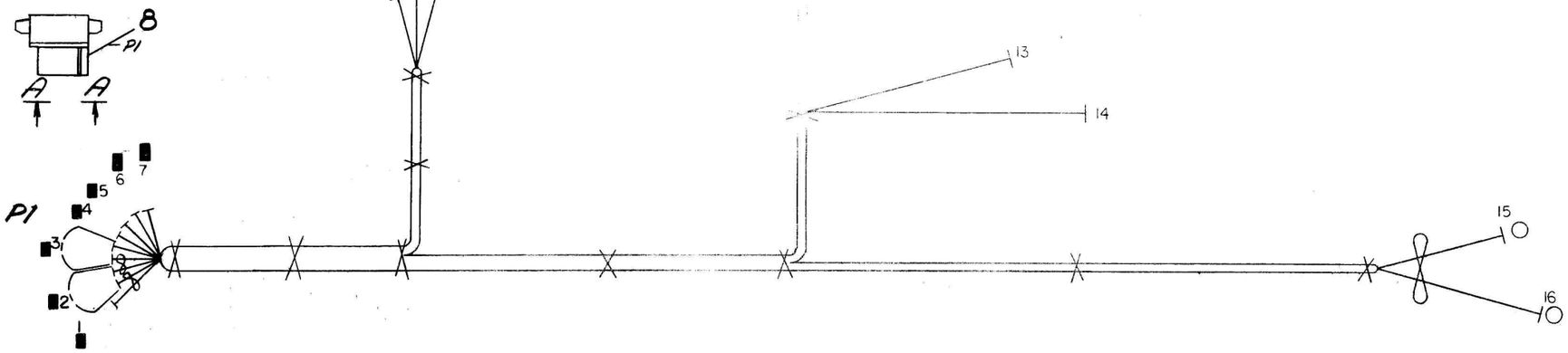
ITEM NO.	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONNECTION	FROM TERM	TO POINT	TO CONNECTION	TO TERM	REMARKS
5	*18	BLU	1	P1-9	7	12	—	6	
	TWP	BLK	2	P1-2		11	—		
4	*18	BLK	2	P1-2		15	—		
	TWP	RED	3	P1-3		16	—		
3	*18	RED	3	P1-3		9	—		
1	*22	YEL	4	P1-1		10	—		
2	*22	VIO	5	P1-6		8	—	6	
10	*22	BRN	6	P1-4		14	—	12	
11	*22	ORN	7	P1-5	7	13	—	12	

NOTES:

1. USE CABLE TIES (X) ITEM *9 AS SHOWN AND AT BREAK OUT POINTS WHERE NECESSARY.



VIEW A-A



DO NOT REDUCE

SCALE

0 IN. 6 IN. 12 IN.

	2	TERMINAL AMP *85952-3	9007855	12
	A/R	WIRE *22 AWG STRD (ORN)	9107350-33	11
	A/R	WIRE *22 AWG STRD (BRN)	9107350-11	10
X	A/R	TIE, CABLE PANDUIT SST1.5M	9007880	9
P1	1	CONN., MATE-N-LOCK 9 PIN MA	12093E1-09	8
▮	7	PIN, MATE-N-LOCK MALE	12093780-01	7
○	7	TERM., AMP TAB RED	9007917	6
	A/R	WIRE, *18 AWG STRD TWP BLU/BLK	9107430-06	5
	A/R	WIRE, *18 AWG STRD TWP RED/BLK	9107430-02	4
	A/R	WIRE, *18 AWG STRD RED	9107360-22	3
	A/R	WIRE, *22 AWG STRD VIO	9107350-77	2
	A/R	WIRE, *22 AWG STRD YEL	9107350-44	1
	QTY.	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

FIRST USED ON OPTION/MODEL	PDP 1105
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES	
DECIMALS	.XXX = .005, .XX = .02, .X = .1
ANGLES	±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓	
MATERIAL	SEE PARTS LIST
FINISH	—
DRN	O. KOBILHAUER, DATE 3-28-72
CHK'D	C. Lechner, DATE 3-7-72
ENG.	DATE 3-7-72
PROJ. ENG.	DATE 3-31-72
PROD.	DATE 4/3/72
NEXT HIGHER ASSY.	D-UA-1105-0-0
SCALE	1/1
SHEET	1 OF 1

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: HARNESS DC (PDP 1105)

SIZE D | CODE | NUMBER 7008856-0-0 | REV.

DIST

REVISIONS: REV. | CHANGE NO. | CHK

DEC FORM NO. DRD 100-A

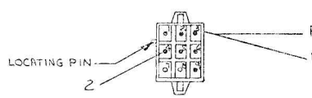
COPYRIGHT © 1976
DIGITAL EQUIPMENT
CORPORATION

WIRE TABLE

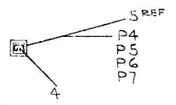
ITEM NO	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONN	ITEM	TO POINT	TO CONN	ITEM	LENGTH	SIGNAL NAME
11	14	BLU		P1-8	2	20	TB1-16		21.50	-15V
16	18	VIO	2	P1-6	2	27	TB1-5		29.00	DCLO
21	12	BLK	5	P1-2	2	25	TB1-7		25.50	GND (1)
18	18	YEL	7	P1-1	2	21	TB1-13		24.25	ACLO
13	12	RED	3	P1-3	2	22	TB1-12		27.25	+5V(1)
20	14	GRY	4	P1-5	2	23	TB1-11		27.00	+15V
15	14	ORN	6	P1-4	2	24	TB1-10		26.75	-LTC
12	14	RED	8	P2-2	2	17	TB1-17		46.15	+5V
13	14	RED	11	P2-5	2	16	TB1-16		42.50	
16	14	BLK	9	P2-3	2	19	TB1-18		43.25	GND2
14	14	BLK	10	P2-4	2	18	TB1-15	SOLDER	45.25	
23	20 TWP	BLK	28	P5	4 5	12	P3-4	2	31.50	
		WHT	29	P4	4 5	13	P3-3	2	31.50	
9	18 TWP	RED	28	P5	4 5	30	P7	4 5	8.50	
		WHT	29	P4	4 5	31	P6	4 5	8.50	
10	18 TWP	BLK	14	P3-2	2	33	———	3	50.25	
		BLU	15	P3-1	2	32	———	3	50.25	
17	14	BLU	34	P2-8	2	36	J1-1	26	6.00	
17	14	BLU	35	P2-7	2	37	J1-2	26	6.00	

SEE NOTE #2

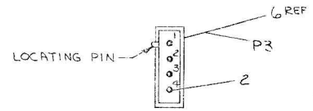
1. USE TIE WRAPS (ITEM 19) APPROXIMATELY EVERY THREE (3) INCHES WHEN NECESSARY, AND AT EVERY BREAKOUT POINT.
2. ITEM #21 (12GA BLK) AND ITEM #23 (20GA VIO) ARE SEPARATE WIRES BUT A TWISTED PAIR SHALL BE MADE OF THEM BEFORE PLACING THEM IN THE HARNESS.
3. SHIELDED GND FOR WIRE TO PINS TO BE CONNECTED ON P4, P5 END ONLY.
4. SOLDER ITEM 22 TO SHIELD WIRE. MAKE SHIELD WIRE AT LEAST 2" LONG.



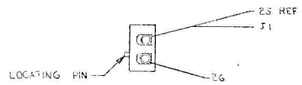
VIEW A-A
SCALE: NONE
(REAR VIEW)



VIEW C-C
SCALE: NONE
(REAR VIEW)

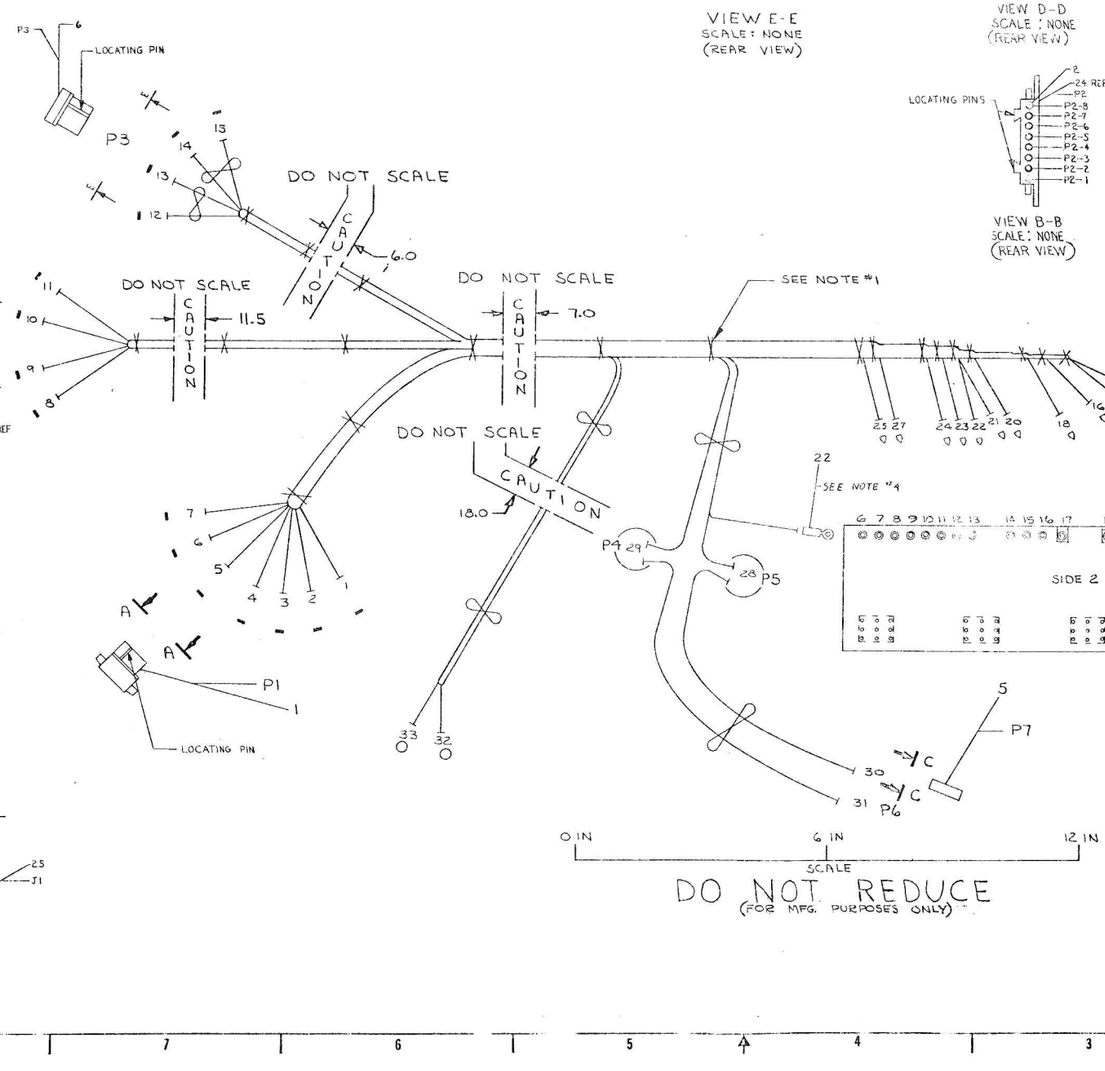


VIEW E-E
SCALE: NONE
(REAR VIEW)



VIEW D-D
SCALE: NONE
(REAR VIEW)

VIEW B-B
SCALE: NONE
(REAR VIEW)



DO NOT REDUCE
(FOR MFG. PURPOSES ONLY)

ITEM NO	QTY	DESCRIPTION	PART NO
	2	SOCKET, TERM. ASSY, CONTACT, SEN	9-1612[illegible]
	1	CONN, MATE-N-LOCK 2 PIN	1210651-02
	1	CONN, MATE-N-LOCK 3 PIN	1210651-03
A/R		WIRE, 22 AWG SHIELDED TWP, STRND	1107701
	1	TERMINAL, SLEEVE, .156	1008160
A/R		WIRE, 12 STRD, BLK	1107380-00
A/R		WIRE, #14 STRD, GRY	9107370-88
	1	POWER DIST. BOARD	DOS-H971-0-0
A/R		WIRE, #18 STRD, YEL	9107350-[illegible]
A/R		WIRE, #14 STRD, BLU	9107370-44
A/R		WIRE, #18 STRD, VIO	9107350-77
A/R		WIRE, #14 STRD, ORN	9107370-33
A/R		WIRE, #14 STRD, BLK	9107370-00
A/R		WIRE, 12 STRD, RED	9107380-22
A/R		WIRE, #18 STRD, [illegible]	[illegible]
A/R		WIRE, [illegible]	[illegible]
A/R		WIRE, #18 STRD TWP, BLK/BLU	9101430-06
A/R		WIRE, #18 STRD TWP, RED/WHT	9101430-29
X A/R		TIE WRAP, PANDUIT, SST-2M	9007032
X A/R		TIE WRAP, PANDUIT, SST-K	900705
	1	CONN, MATE-N-LOCK 4 PIN	1207651-04
	4	HOUSING, 1-480417-0	1210820-1
	4	MINI-FAST, #350241-1	1210820-2
O	2	CONN, SOLDERLESS, 30102	9007917
	17	PIN, CONTACT (MALE)	1013178-01
SYM	1	CONN, MATE-N-LOCK 9 PIN	1209351-09

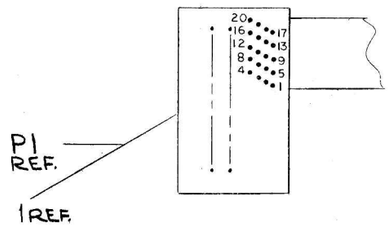
11/35	
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	
DECIMALS: XXX ± .005, XX ± .02, X ± .1	ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP EDGES & SURFACE QUALITY	
MATERIAL: SEE PARTS LIST	NEXT ASSY: E.C.A.-BAII-0
FINISH	SCALE: 1/1
DRAWN: A.V.S. 3-75	
CHECKED:	
ENGR:	
PROJ:	
TITLE: MOTOR & POWER TO DISTRIBUTION BOARD HARNESS	
SIZE: E	DRAWING NO: IA7009208-0-0
SHEET 1 OF 1	

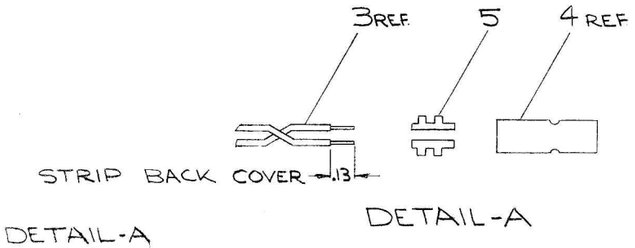
DIGITAL EQUIPMENT CORPORATION

Drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

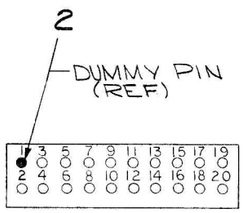
NOTES:

1. CONNECTORS P1 AND P2 ARE TO BE WIRED POINT TO POINT (P1-1 TO P2-1 P1-2 TO P2-2 ECT.)

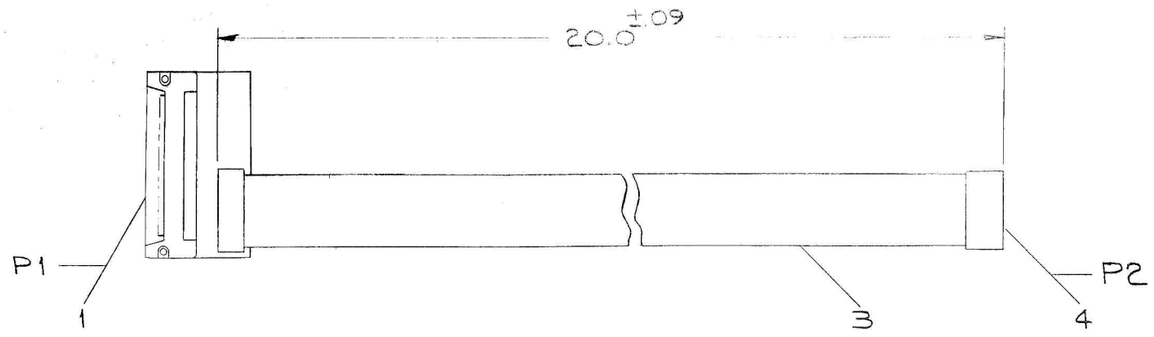




DETAIL-A



VIEW A-A
(FRONT VIEW)



ITEM NO	QTY.	DESCRIPTION	PART NO.
		PARTS LIST	
5	19	MINI-TERMINAL #47783 BERG	12100890
4	1	RECEPTACLE 20 PIN #65043-027 BERG	1210918-027
3	A/R	CABLE SCOTCHFLEX #3350 3M	9107747
2	1	DUMMY PIN #47900 BERG	9009190
1	1	DC DISTRIBUTION MODULE	5409949-00

FIRST USED ON OPTION/MODEL: PDP1105

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓

MATERIAL: SEE PARTS LIST
FINISH:

DRN. [signature] DATE 2-16-72
CHK'D C. Teschner DATE 3-1-72
ENG. [signature] DATE 3-24-72
PROJ. ENG. [signature] DATE 3-24-72
PROD. [signature] DATE 3-27-72

NEXT HIGHER ASSY: D-UA-1105-0-0
SCALE NONE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: HEADER CABLE ASSY

SIZE D | CODE 1A | NUMBER 7008820-0 | REV A
DIST.

REVISIONS	REV	CHK
CHANGE NO. 7008820-00001	A	
DEMORANVILLE [signature] 3-15-72		

DEC FORM NO. DRD 150-A

158

This drawing and ... erty of Digital Equipment ... reproduced or copied or used ... the basis for the manufacture ... written permission.

J1 BERG HEADER ON P.C. CARD	J2 20 PIN 3M CONNECTOR	SIGNAL	OUTPUT CABLE (REFERENCE)
VV	9-12	GROUND	GROUND (A)
UU	9-12	GROUND	GROUND (B)
B	9-12	GROUND	GROUND (UU)
A	9-12	GROUND	GROUND (VV)
RR	16	SERIAL IN (TTL)	E
NN	15	20 MA INTERLOCK	H
LL	14	SERIAL IN (+20MA)	K
DD	5	SERIAL IN (-20MA)	S
V	7	SERIAL OUT (+20MA)	AA
T	6	CLOCK IN (TTL)	CC
R	4	READER RUN (-20MA)	EE
N	3	CLOCK DISABLE (TTL)	HH
L	2	SERIAL OUT (-20MA)	KK
F	18	READER RUN (+20MA)	PP
D	19	SERIAL OUT (TTL)	SS
C	20	+5 VOLTS	TT
BB	8	+15 VOLTS	U

REVISIONS	REV.	CHANGE NO.	CHK

BRUNING 40-107 15968

DEC FORM NO. DRC 199-A

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP-11Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS	ANGLES
.XXX = .005 .XX = .02 .X = .1	± 0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL

FINISH

DRN.	DATE	4-672
CHK'D. C. Teschner	DATE	4-672
ENG.	DATE	4-12-72
PROJ. ENG.	DATE	4/13/72
PROD.	DATE	4/13/72

NEXT HIGHER ASSY. D-IA-5409949-ØØ

SCALE

SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE

CIRCUIT SCHEMATIC

SIZE	CODE	NUMBER	REV.
C	CS	5409949-01	

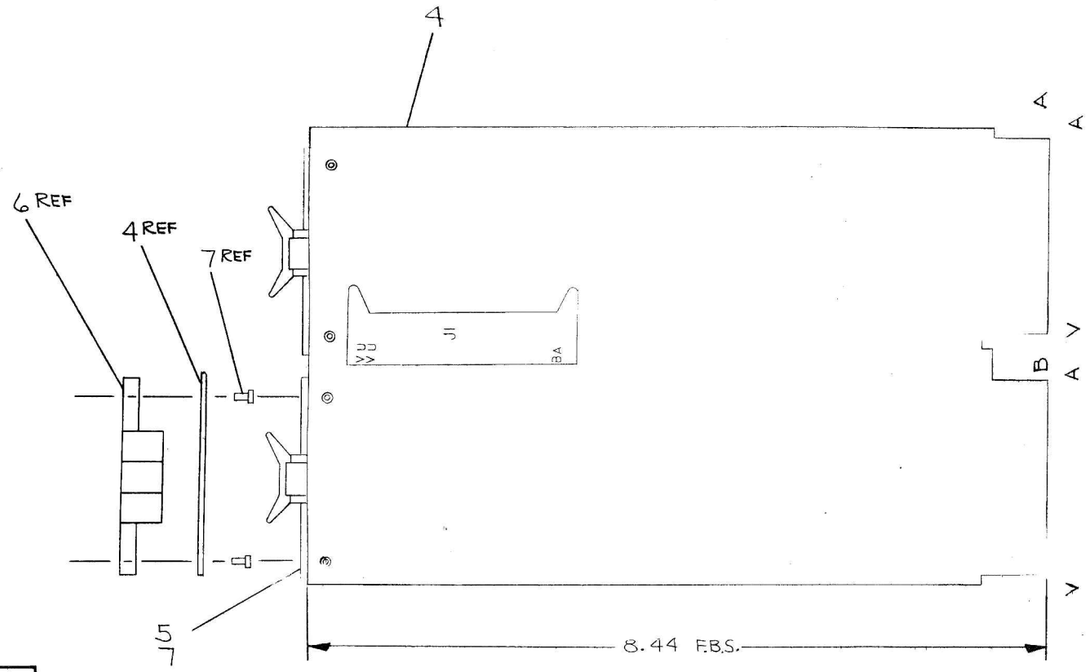
DIST.

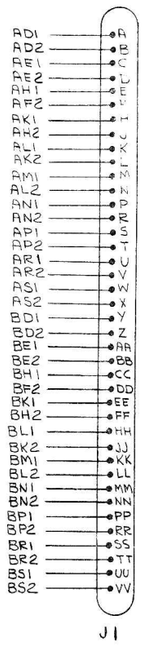
SIZE C CODE CS NUMBER 5409949-01 REV. -

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

COPYRIGHT © 1972
DIGITAL EQUIPMENT
CORPORATION

NOTES:





QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
REF		ASSEMBLY, HOLE LOCATION	MCS-M9970-0-4	1
REF		ASSEMBLY, HOLE LAYOUT	D-AH-M9970-0-5	2
REF		MODULE BOARD HISTORY	B-MH-M9970-0-6	3
1		ETCHED CIRCUIT BOARD	5010347	4
1		BERG CONN, 40 PIN	1209941	5
2		HANDLE, FLIP-CHIP-MAGNETA	9008337-6	6
4		EYELET, HANDLE	9006732	7

PARTS LIST

ETCH BOARD REV A

FIRST USED ON OPTION MODEL

IC TYPE	GND	+ 5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE		

IC PIN LOCATIONS

BRUNING 40-522 16699
DEC FORM NO.

REV	CHANGE NO.	DEC NO.	EIA NO.	DEC NO.	EIA NO.

REVISIONS

CHK

SEMICONDUCTOR CONVERSION CHART

DRN.	K. Sousa	DATE 11-30-72
CHK'D	[illegible]	DATE 12-1-72
ENG.	[illegible]	DATE 5-14-73
PROJ. ENG.	[illegible]	DATE 5-14-73
PROD.	[illegible]	DATE 5-14-73

NEXT HIGHER ASSY //

SCALE NONE

SHEET 1 OF 1

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
BERG BACKPLANE
CONNECTOR

SIZE	CODE	NUMBER	REV.
D	CS	M9970-0-1	*

DIST.

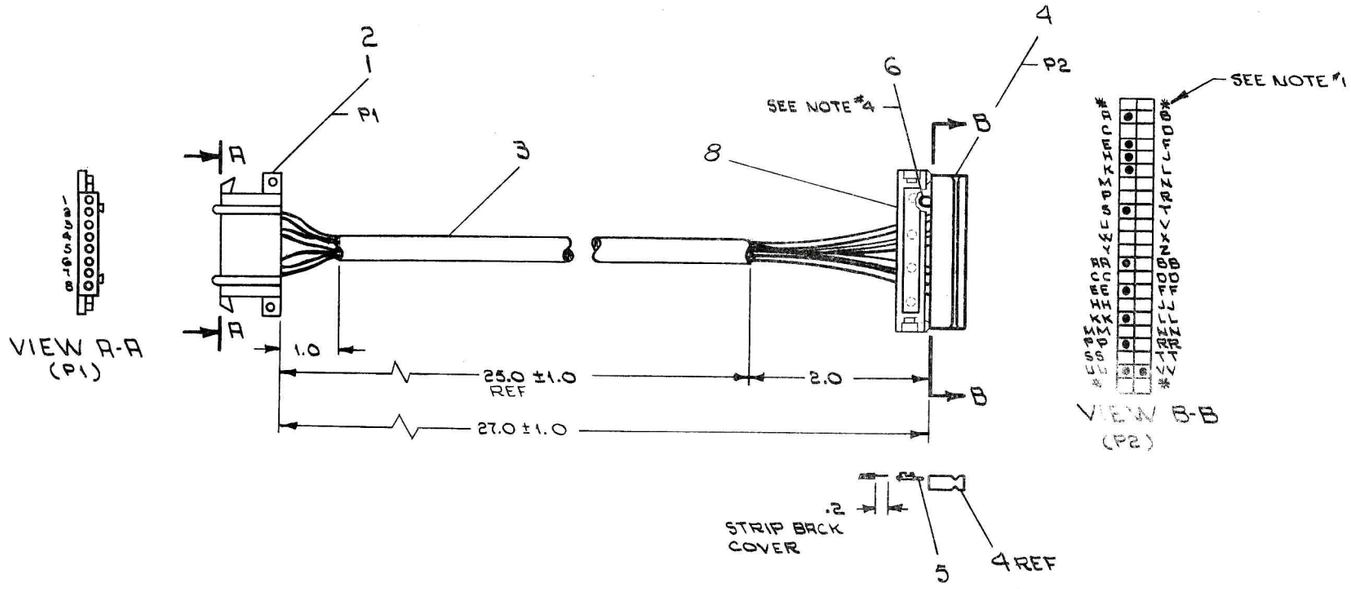
160

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

WIRE TABLE

ITEM NO.	DESCRIPTION AWG	COLOR	PAIR NO.	FROM CONNECTION	WITH	TO CONNECTION	WITH
3	22	BLK	1	P1-2	2	P2-KK	5
3	↑	RED	1	P1-3	2	P2-S	↑
3,7		SHIELD		SEE NOTE #2	—	P2-A(NOTE #3)	
3		BLK	2	P1-4	2	P2-EE	
3		WHT	2	P1-5	2	P2-AA	
3,7		SHIELD		SEE NOTE #2	—	P2-UU(NOTE #3)	
3		BLK	3	P1-6	2	P2-PP	
3		GRN	3	P1-7	2	P2-K	
3,7	↓	SHIELD		SEE NOTE #2	—	P2-VV(NOTE #3)	↓
6	22	BLK	—	P2-E	5	P2-H	5

NOTES:
1. * ASTERISKS INDICATE CAVITIES NOT USED OR DESIGNATED BY LETTERS.
2. DRAIN WIRES TO BE CUT BACK TO OUTER INSULATION ON P1 END OF CABLE ONLY. SHIELDS TO BE CUT BACK TO OUTER INSULATION ON BOTH ENDS OF CABLES.
3. DRAIN WIRES ON P2 END OF CABLE TO BE EACH ENCLOSED WITH ITEM #7 (TUBING) FROM END OF CABLE JACKET TO POINT WHERE THEY ENTER P2 CONNECTOR.
4. ITEM #6 (WIRE) TO BE APPROXIMATELY ONE(1) INCH LONG.



ITEM NO.	QTY.	DESCRIPTION	PART NO.
8	1	STRAIN RELIEF	12111-36
7	A/R	TUB. #12 TEF. THINWALL (WHT)	9107128-11
6	A/R	WIRE, 22 AWG STR TEF INS	9107330-00
5	11	SOCKET, BERG #47106	1210089-6
4	1	HOUSING, BERG #65093-015	1210918-15
3	A/R	CABLE, BELDEN #8777 3PR SHLD	9107725-0
2	6	CONTACT MATE-N-LOK (SOCKET)	1209379
1	1	CONN. MATE-N-LOK (FEMALE)	1209340-00

PARTS LIST

REVISIONS	CHANGE NO	REV
CHG	KL8E-00002	A
CHG	KL8E-00006	B

DRN.	J. Clark	DATE 3/15/73
CHK'D.	Jim McNamara	DATE 4-4-73
ENG.	Ed Clark	DATE 4-4-73
PROJ. ENG.	Ed Clark	DATE 4-4-73
PROD.		DATE

FIRST USED ON OPTION/MODEL: PDP-8E

DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± FRACTIONS ± ANGLES ± 0°30'
FINAL SURFACE QUALITY
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL: SEE PARTS LIST

FINISH: #

NEXT HIGHER ASSY: A-ML KL8-E-0

SCALE: NONE

SHEET 1 OF 1

DIGITAL EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

TITLE: CABLE ASSEMBLY (KL8E)

SIZE D | CODE IA | NUMBER 7008360-0-0 | REV B

DEC FORM NO. PRO 100

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

W130 PARTS REFERENCE

ITEM NO	DRAWING REFERENCE	DESCRIPTION	PART NUMBER	QUANTITY
1	R1,R3,R5,R7,R9,R11,R13,R15,R17,R19,R21,R23, R25,R27,R29,R31,R33,R35,R37,R39,R41,R43, R45,R47,R49,R51,R53,R55	15K, 1/4W, 5% RES.	13004-6	28
2	R2,R4,R6,R8,R10,R12,R14,R16,R18,R20,R22, R24,R26,R28,R30,R32,R34,R36,R38,R40, R42,R44,R46,R48,R50,R52,R54,R56	470, 1/4W, 5% RES.	1300316	28
3	Q1-Q56	DEC 3009B TRANSISTOR	1503100	56
4	P1	H807 BLOCK, CONNECTOR	1209123	1

W131 PARTS REFERENCE

ITEM NO	DRAWING REFERENCE	DESCRIPTION	PART NUMBER	QUANTITY
1	E1	DEC 7400N I.C.	1905575	1
2	C1	.01 MFD, 100V, 20% DC CAP.	1001610	1
3	C2	6.8 MFD, 35V, 20% ST CAP.	1000067	1
4	R1,R2,R3,R4,R5	3K, 1/4W, 5% RES.	1300432	5
5	R6	330, 1/4W, 5% RES.	1300295	1
6	Q1	DEC 3009B TRANSISTOR	1503100	1
7	I1-I28	LAMP, HUDSON, BLUE #2309G	1209219	28
8	S1-S4	SWITCH, TOGGLE, SPST, 6ATI-T2	1201168	4

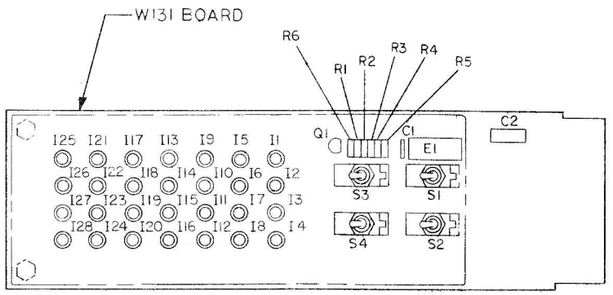
NOTES:
1. THE KM11 IS A TWO MODULE (W130, W131) OPTION TO THE KA11 TO AID MAINTENANCE. THIS PREWIRED OPTION IS INSTALLED BY INSERTING THE W130 MODULE INTO LOCATION B02 AND INSERTING THE W131 MODULE INTO THE W130. NOTE THAT THE SWITCHES AND LIGHTS FACE TOWARD AND EXTEND BELOW THE CONSOLE. THE BOTTON COVER MUST BE REMOVED WITH THE CHASSIS EXTERNAL TO THE CABINET.

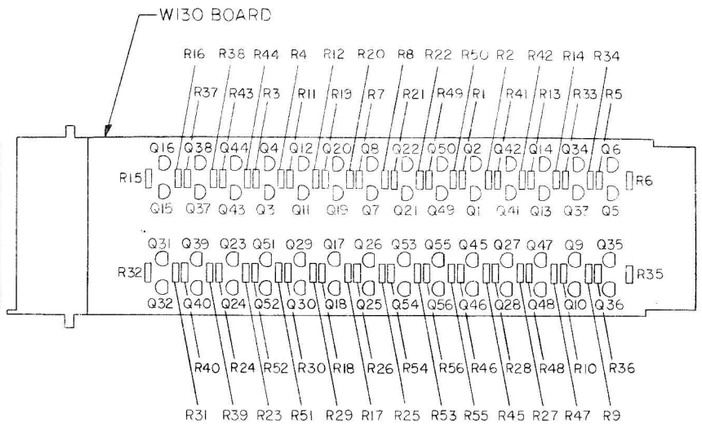
2. LABELS FOR THE INTERNAL MACHINE STATES LAMPS ARE NOTED ON THE W131 ETCH BOARD. SWITCHES PROVIDE A MANUAL CLOCK AND BUS RESPONSE AND **ARE** ACTIVE WHEN THE TOGGLE IS TOWARD THE NAME. NORMAL MACHINE OPERATION REQUIRES THAT ALL SWITCHES BE IN THE OFF POSITION.

3. "M CLK ENABLE" AND "M CLK" PROVIDE A MANUAL CLOCK FOR THE KA11. "M CLK ENABLE" IS ACTIVATED WHILE THE PROCESSOR IS HALTED. EACH TOGGLE OF "M CLK" THEN STEPS THE PROCESSOR THROUGH THE SMALLEST PROCESSOR CLOCK INTERVALS, THE R/W STATES, THE NEXT HIGHEST CLOCK INTERVAL (S CLK) IS PROVIDED BY FOUR TOGGLES (2 COMPLETE SWITCH CYCLES) AND INDICATED BY THE R/W2 LAMP. R/W2 IS THE LAST (OR REST) R/W STATE IN A "S CLK" INTERVAL. NORMAL OPERATION IS RESUMED WHEN "M CLK" AND THEN "M CLK ENABLE" ARE RETURNED TO OFF.

4. "NO TIME OUT" AND "SSYN" PROVIDE A MANUAL BUS RESPONSE TO THE PROCESSOR. IT IS USED WHEN OTHER DEVICES ARE NOT AVAILABLE. "NO TIME OUT" IS ACTIVATED, WHILE THE PROCESSOR IS HALTED, TO ELIMINATE AN ERROR TRAP ON MANUAL "SSYN". AT THE APPROPRIATE TIMES IN A BUS TRANSFER "SSYN" IS ACTIVATED AND DEACTIVATED.

COMPONENT PLACEMENT





PIN NOMENCLATURE

MODULE	PROCESSOR
A	B

REVISIONS	REV.	CHANGE NO.	CHK.

FIRST USED ON OPTION/MODEL	DO NOT SCALE DRAWING	QTY.	DESCRIPTION	PART NO.	REV
PDP11	UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30' FINAL SURFACE QUALITY ✓ REMOVE BURRS AND BREAK SHARP CORNERS	PARTS LIST			
	MATERIAL				
	FINISH				

DRN.	[illegible]	DATE 4-4-8
CHK'D	[illegible]	DATE 4/4/7
ENG.	[illegible]	DATE 5-4-71
PROJ. ENG.	[illegible]	DATE 5/4/71
PROD.	[illegible]	DATE 5/5/71

NEXT HIGHER ASSY: A-ML-KM11-Ø

SCALE: 1/1

SHEET 1 OF 5

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: MAINTENANCE BOARD (18-)

SIZE D | CODE BS | NUMBER KM11-Ø-ML | REV

DIST.

DEC FORM NO ORD 100

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

CONNECTOR AT REAR OF M[illegible]
TO EXTEND MAINTENANCE BOARDS
[illegible] (KM-8).

+5V	BØ2A2 A2	+5V
~+8V	BØ2B1 B1	+8V
KM-8 M CLK ENABLE L	V1	BØ2V2 KM-2 M CLK ENABLE L
KM-8 M CLK L	M1	BØ2U1 KM-2 M CLK L
KI8-2 TIME OUT (1) H	B2	KM-2 TIME OUT (1)H
BUS SSYN L	A1	BØ2A1 BUS SSYN L
	U1	KM-2 LAMP BSRØ L
	H1	KM-2 LAMP BSR 1 L
	D2	KM-2 LAMP BSR 3 L
	F2	KM-2 LAMP BSR 7 L
GND	C2,J1	GND
	C2	
	R1	KM-2 LAMP BSR 15 L
	H1	KM-2 LAMP BSR 14 L
	D2	KM-2 LAMP BSR 12 L
	H2	KM-2 LAMP BSR 8 L
	P1	KM-2 LAMP ISR Ø L
	D1	KM-2 LAMP ISR 1 L
	E2	KM-2 LAMP ISR 3 L
	J2	KM-2 LAMP ISR 7 L
	N1	KM-2 LAMP ISR 18 L
	T2	KM-2 LAMP ISR 14 L
	U2	KM-2 LAMP ISR 12 L
	K2	KM-2 LAMP ISR 8 L
	N2	KM-2 LAMP N (1)L
	E1	KM-2 LAMP Z (1)L
	V2	KM-2 LAMP V (1)L
	C1	KM-2 LAMP C (1)L
	T1	KM-2 LAMP T (1)L
	R2	KM-2 LAMP TRAPS L
	B1	KM-2 LAMP B MSYN L
	S2	KM-2 LAMP B SSYN L
	R2	KM-2 LAMP R/WZ L
	S1	KM-2 LAMP TST1 L
	T2	KM-2 LAMP TST2 L
	R2	KM-2 LAMP ISR 2 L

KI-3 BSR Ø H — BØ2R2 — R29 15K — Q29 Q3Ø — R3Ø 47Ø — KI-3 BSR 1 H — BØ2E2 — R21 15K — Q21 Q22 — R22 47Ø — KI-3 BSR 3 H — BØ2H1 — R1 15K — Q1 Q2 — R2 47Ø — KI-3 BSR 7 H — BØ2L2 — R43 15K — Q43 Q44 — R44 47Ø

KI-3 BSR 15 H — BØ2N2 — R39 15K — Q39 Q4Ø — R4Ø 47Ø — KI-3 BSR 14 H — BØ2D2 — R49 15K — Q49 Q5Ø — R5Ø 47Ø — KI-3 BSR 12 H — BØ2H2 — R19 15K — Q19 Q2Ø — R2Ø 47Ø — KI-3 BSR 8 H — BØ2J2 — R11 15K — Q11 Q12 — R12 47Ø

KI-3 ISR Ø H — BØ2S1 — R55 15K — Q55 Q56 — R56 47Ø — KI-3 ISR 1 H — BØ2M2 — R37 15K — Q37 Q38 — R38 47Ø — KI-3 ISR 3 H — BØ2F2 — R7 15K — Q7 Q8 — R8 47Ø — KI-3 ISR 7 H — BØ2E1 — R33 15K — Q33 Q34 — R34 47Ø

KI-3 ISR 15 H — BØ2R1 — R45 15K — Q45 Q46 — R46 47Ø — KI-3 ISR 14 H — BØ2K1 — R31 15K — Q31 Q32 — R32 47Ø — KI-3 ISR 12 H — BØ2S2 — R17 15K — Q17 Q18 — R18 47Ø — KI-3 ISR 8 H — BØ2M1 — R9 15K — Q9 Q1Ø — R1Ø 47Ø

K9-5 N (1)H — BØ2P1 — R27 15K — Q27 Q28 — R28 47Ø — K9-5 Z (1)H — BØ2L1 — R51 15K — Q51 Q52 — R52 47Ø — K9-5 V (1)H — BØ2F1 — R5 15K — Q5 Q6 — R6 47Ø — K9-5 C (1)H — BØ2D1 — R13 15K — Q13 Q14 — R14 47Ø

K9-4 T (1)H — BØ2J1 — R15 15K — Q15 Q16 — R16 47Ø — KI2-3 TRAPS H — BØ2C1 — R41 15K — Q41 Q42 — R42 47Ø — KI3-3 B MSYN H — BØ2T2 — R35 15K — Q35 Q36 — R36 47Ø — KI3-3 B SSYN H — BØ2U2 — R53 15K — Q53 Q54 — R54 47Ø

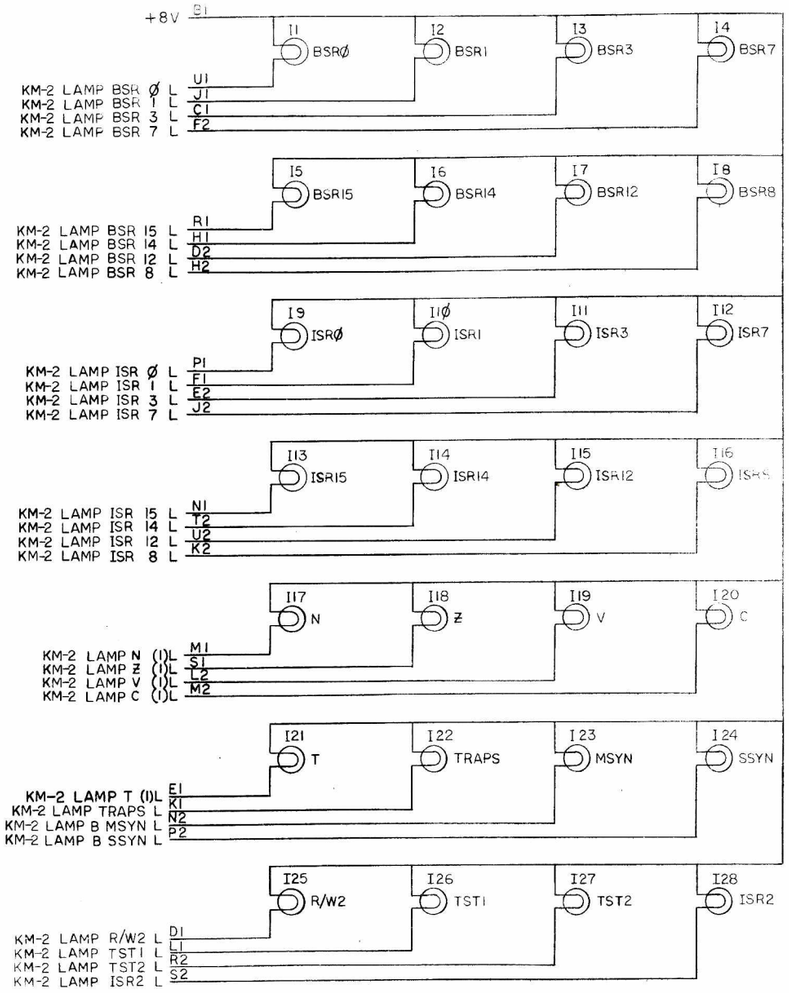
KI-2 R/WZ H — BØ2K2 — R3 15K — Q3 Q4 — R4 47Ø — KM-2 TST1 H — BØ2N1 — R47 15K — Q47 Q48 — R48 47Ø — KM-2 TST2 H — BØ2V1 — R25 15K — Q25 Q26 — R26 47Ø — KI-3 ISR 2 H — BØ2P2 — R23 15K — Q23 Q24 — R24 47Ø

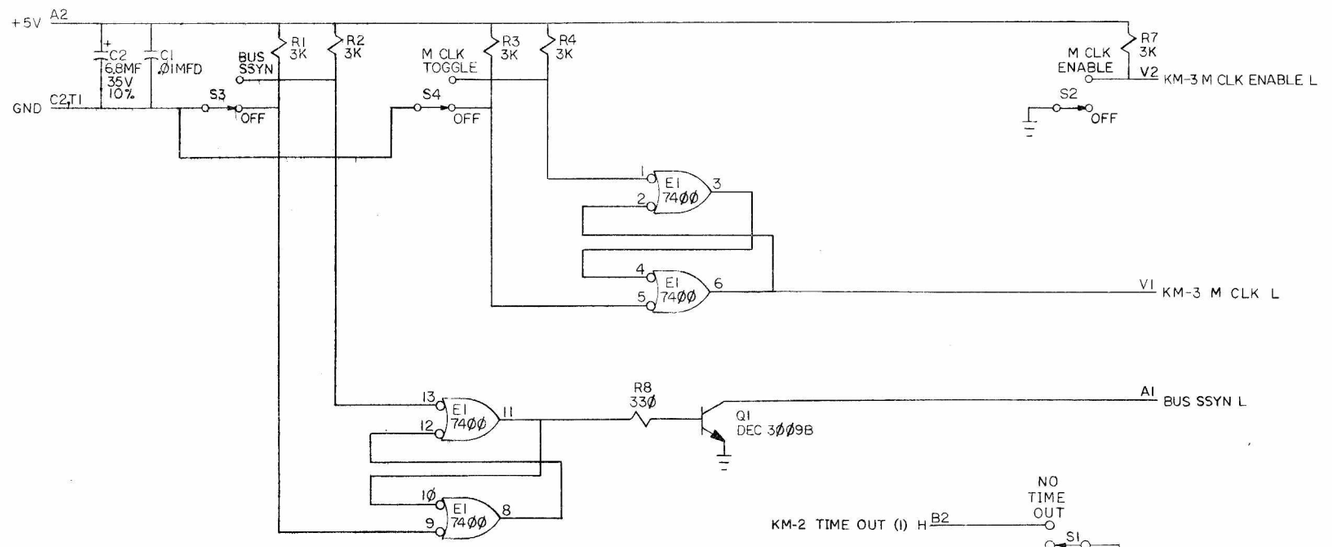
FIRST USED ON OPTION/MODEL: PDP 11	QTY.	DESCRIPTION	PART NO. / ITEM NO.
		PARTS LIST	
UNLESS OTHERWISE SPECIFIED: UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES; TOLERANCES DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'; FINAL SURFACE QUALITY; REMOVE BURRS AND BREAK SHARP CORNERS	DRN: [illegible]	DATE: 12-15-67	Digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
	CHK'D: [illegible]	DATE: 9/[illegible]	
	ENG: [illegible]	DATE: 3-6-74	TITLE: MAINTENANCE BOARD (1)
	PROJ. ENG.	DATE	
	PROD: [illegible]	DATE: 5/[illegible]	W13Ø KM-2
MATERIAL	NEXT HIGHER ASSY: A-MI-KMI-Ø		SIZE D CODE BS NUMBER KMI-Ø-MB REV.
FINISH	SCALE: NONE		
	SHEET 2 OF 3		DIST

REVISIONS: REV | CHANGE NO. | CHK

DEC FORM NO 2HD 102A

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.





FIRST USED ON OPTION/MODEL: PDP 11	QTY.	DESCRIPTION	PART NO.	ITEM NO.
		PARTS LIST		
UNLESS OTHERWISE SPECIFIED	DRN J. Curtis	DATE 12-17-69	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30' FINAL SURFACE QUALITY √ REMOVE BURRS AND BREAK SHARP CORNERS	CHK'D	DATE 4/21/70	TITLE MAINTENANCE BOARD(2)	
	ENG. HC	DATE 3-6-70		
	PROJ ENG.	DATE 3-6-70		
	PROD Mackintosh	DATE 5/5/70	W131 KM-3	
MATERIAL	NEXT HIGHER ASSEMBLY A-ML-KM11-Ø		SIZE D CODE BS NUMBER KM11-Ø-MB REV.	
FINISH	SCALE NONE		DIST.	
	SHEET 3 OF 3			

REVISIONS: REV. | CHANGE NO. | CHK

DEC FORM 10 DRD 102A

SIZE D CODE BS NUMBER KM11-Ø-MB REV.

164

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

MPC		AMUX				
3 D	7 D	3 B	7 B	11 B	15 B	BUT IR D
2 D	6 D	2 B	6 B	10 B	14 B	BBUSY D
1 D	5 D	1 B	5 B	9 B	13 B	SSYN D
0 D	4 D	0 B	4 B	8 B	12 B	MSYN D

D-DIM WHEN ASSERTED
B-BRIGHT WHEN ASSERTED

BUS SSYN →	AC LO →
M CLK PULSE →	M CLK EN →

KD11-B KM1

5509081-0-9

FIRST USED ON ORT /1105
11/05

REVISIONS	REV.	CHANGE NO.	CHK

SPEC* 9200100-94 (BLOCK)

DRN. D. Mattson	DATE 5-11-72
CHK'D. [illegible]	DATE
ENG.	DATE
PROJ. ENG. J. Perlin	DATE 5-22-72
PROD. R K Peterson	DATE 5/24/72
NEXT HIGHER ASSY C-IA-5509081-0-0	
SCALE	
SHEET OF	

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
MAINT MODULE OVERLAY
(11/05 - KM1)

SIZE	CODE	NUMBER	REV.
A	55	5509081-0-9	

DIST.

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

MPC		SPAD	ALU			
3 D	7 D	03 B	S3 D	ALU M B	AUXC D	MSYN D
2 D	6 D	02 B	S2 D	CIN B	BUT JJ D	SSYN D
1 D	5 D	01 B	S1 D	EALU B	BUT UN D	C1 D
0 D	4 D	00 B	S0 D	SPWR B	CNST D	C0 D

D-DIM WHEN ASSERTED
B-BRIGHT WHEN ASSERTED

BUS SSYN →	AC LO →
M CLK	M CLK
PULSE →	EN →

KD11-B KM2

5509081-0-10

FIRST USED ON DPT/MOD
11/05

REVISIONS	REV.	CHANGE NO.	CHK

SPEC# 9200160-94 (BLACK)

DRN. D. Mattson	DATE
CHK'D. [illegible]	DATE
ENG.	DATE
PROJ. ENG. A. Teicher	DATE 5-23-72
PROD. R.V. Peterson	DATE 5/24/72
NEXT HIGHER ASSY C-IA-5509081-0-0	
SCALE	
SHEET OF	

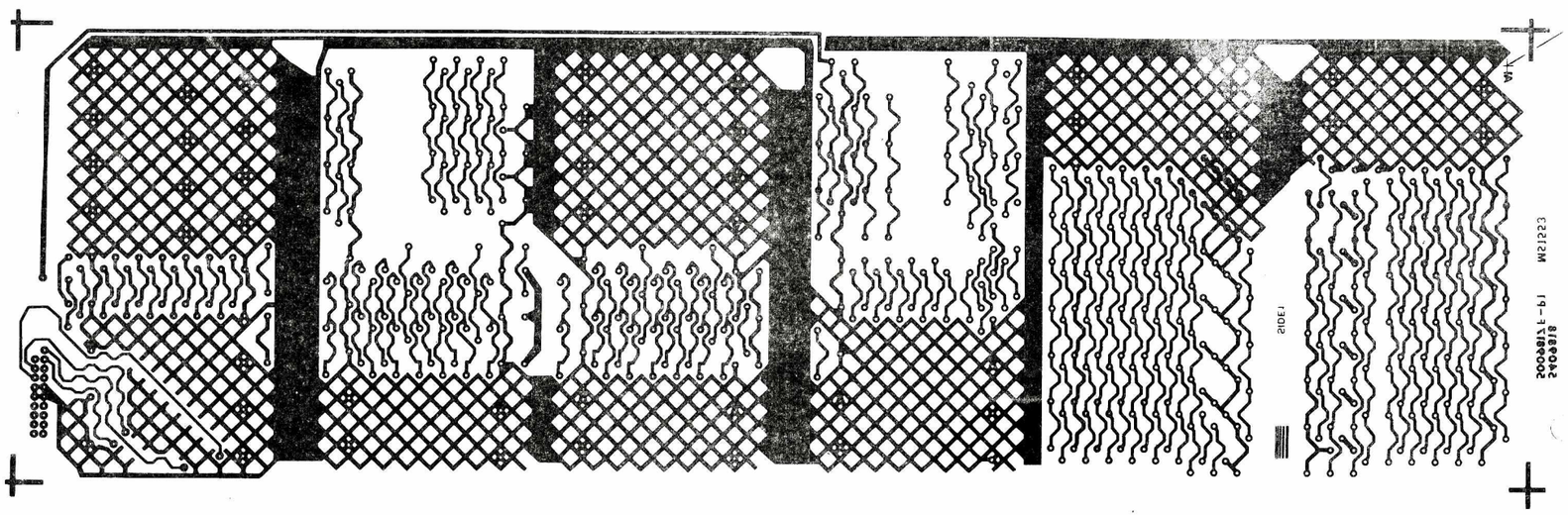
digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
MAINT MODULE OVERLAY
(11/05 - KM2)

SIZE	CODE	NUMBER	REV.
A	SS	5509081-0-10	

DIST. G

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



BLOCK SIDE-SIDE #1

(AS SEE THROUGH SIDE #2)

REVISIONS				
CHK	CHANGE NO.	REV.		
	5409818-00001	D	B. Hale	5-2-72
			B. MINOR	5-24-72
	5409818-00002	E	Hauduke	2/5/73
			G. GRAHAM	
			G. Graham	2-12-73
	5409818-00003	F	Hauduke	3/27/73
			D. RANDALL	
	5409818-00004	H	B. Hale	5-29-73
			G. GRAHAM	
			G. Graham	6-1-73

FIRST USED ON	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP-11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

DRN. ROBICHAUD	DATE 3-20-72	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D. C. TESCHNER	DATE 3-21-72	
ENG. W. MINOR	DATE 3-21-72	
PROJ. ENG. B.D. WEEKS	DATE 3-21-72	
PROD. R.K. PETERSON	DATE 3-21-72	
FIRST USED ON NEXT HIGHER ASSY.		
C-1A-5409818-0-0		
SCALE 1/1		
SHEET 1 OF 2		

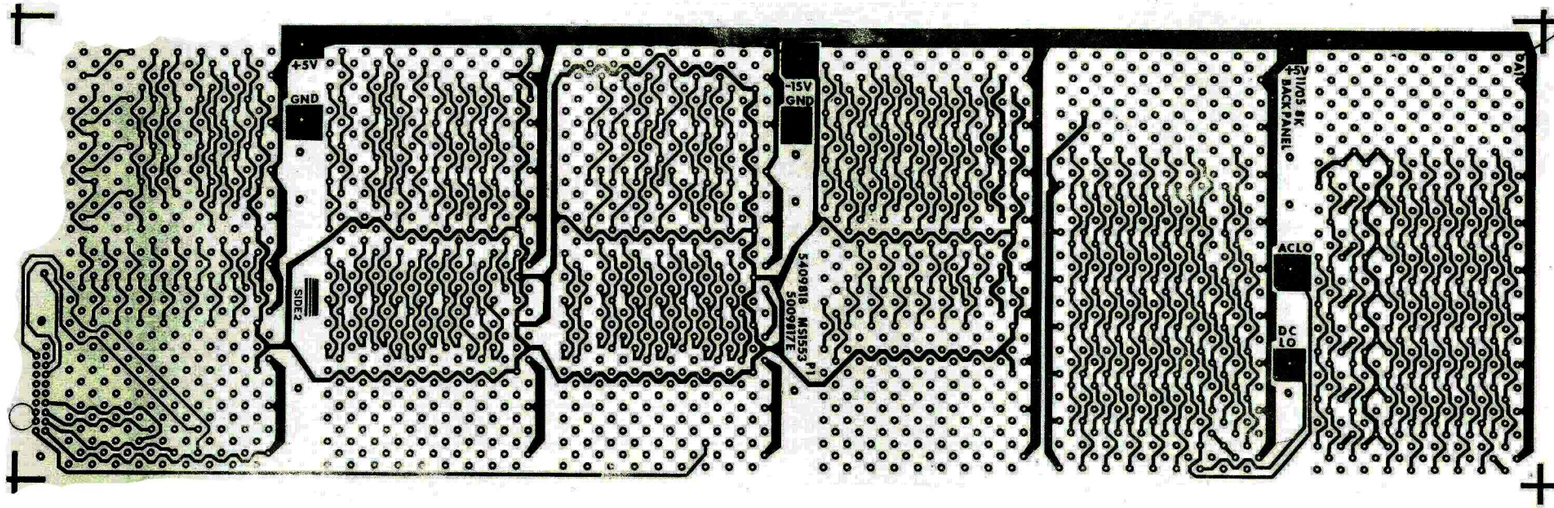
TITLE
CIRCUIT
SCHEMATIC (8K)

SIZE	CODE	NUMBER	REV.
C	CS	5409818-0-1	H
DIST.			

DEC FORM NO. DRC

4 3 2 1

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



SOLDER SIDE - SIDE #2

FIRST USED ON	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP-11Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL —/—

FINISH —/—

DRN. ROBICHAUD	DATE 3-20-72	
CHK'D. C. TESCHNER	DATE 3-21-72	
ENG. W. MINOR	DATE 3-21-72	
PROJ. ENG. B.D. WEEKS	DATE 3-21-72	
PROD. R.K. PETERSON	DATE 3-21-72	

FIRST USED ON NEXT HIGHER ASSY.
C-1A-5409818-0-0
SCALE 1/1
SHEET 2 OF 2

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
CIRCUIT
SCHEMATIC (8K)

SIZE	CODE	NUMBER	REV.
C	CS	5409818-0-1	H

DIST.

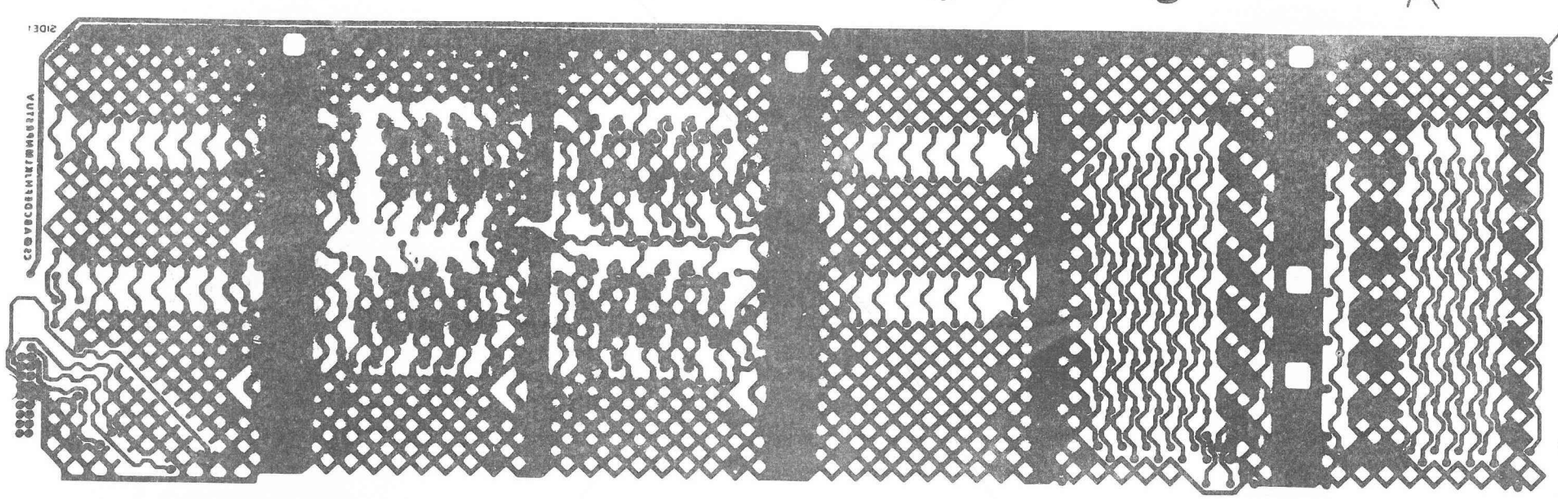
REVISIONS

REV.	CHANGE NO.	CHK

DEC FORM NO. DRC

SIZE C CODE CS NUMBER 5409818-0-1 REV. H

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



BLOCK SIDE
(SIDE #1)
— AS SEEN THRU SIDE #2 —

REVISIONS			
CHK	CHANGE NO.	REV.	
	5410035-00001	B	2/11/73 G. GRAHAM
	5410035-00002	C	3/9/73 D. RANDALL
	5410035-00003	D	5-25-73 G. GRAHAM

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO	REF NO
PDP-11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0.50
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL —/—

FINISH —/—

DRN		DATE 5-11-72
CHKD	C. Teschner	DATE 5-11-72
ENG	W. Brown	DATE 5-11-72
PROJ ENG	G. D. Wicks	DATE 5-12-72
PROD	R. V. Peterson	DATE 5/15/72

NEXT HIGHER ASSY.
C-IA-5410035-0-0

SCALE 1/1
SHEET 1 OF 2

digital EQUIPMENT CORPORATION

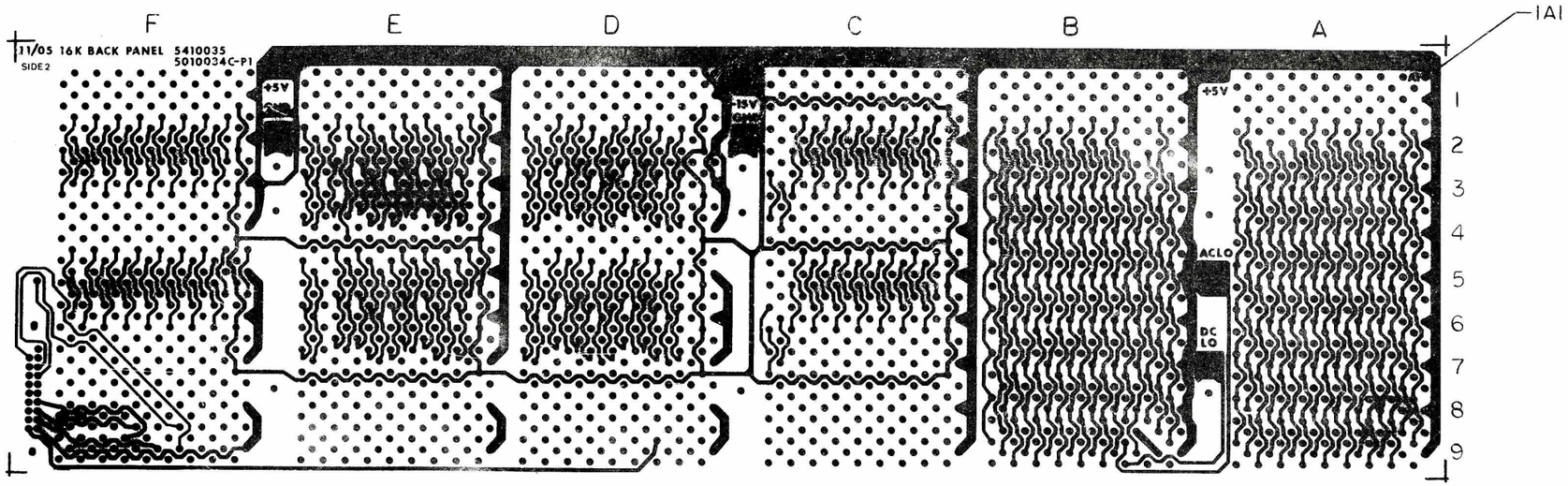
TITLE
CIRCUIT
SCHEMATIC (16K)

SIZE	CODE	NUMBER	REV.
C	CS	5410035-0-1	D

DIST.

DEC FORM NO. DPC

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



SOLDER SIDE
(SIDE 2)

FIRST USED ON OPTION/MODEL: PDP11/05	QTY	DESCRIPTION	PART NO.
		PARTS LIST	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES
DECIMALS: .XX ± .01; FRACTIONS: ± 1/64; ANGLES: ± 0°30'
FINAL SURFACE QUALITY: √
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL: —

FINISH: —

DRN. R.Cook	DATE 5/11/72	digital EQUIPMENT CORPORATION
CHKD C.Teschner	DATE 5-11-72	
ENG. W.Munn	DATE 5-11-72	
FIRMWARE B.D.Wade	DATE 5-11-72	
PROD. R.K.Peterson	DATE 5/15/72	
NEXT HIGHER ASSY E-IA-5410035-0-0		
SCALE —		
SHEET 2 OF 2		

TITLE: CIRCUIT SCHEMATIC (16K)

SIZE	CODE	NUMBER	REV.
C	CS	5410035-0-1	D

DIST

REVISIONS		
CHK	CHANGE NO.	REV.

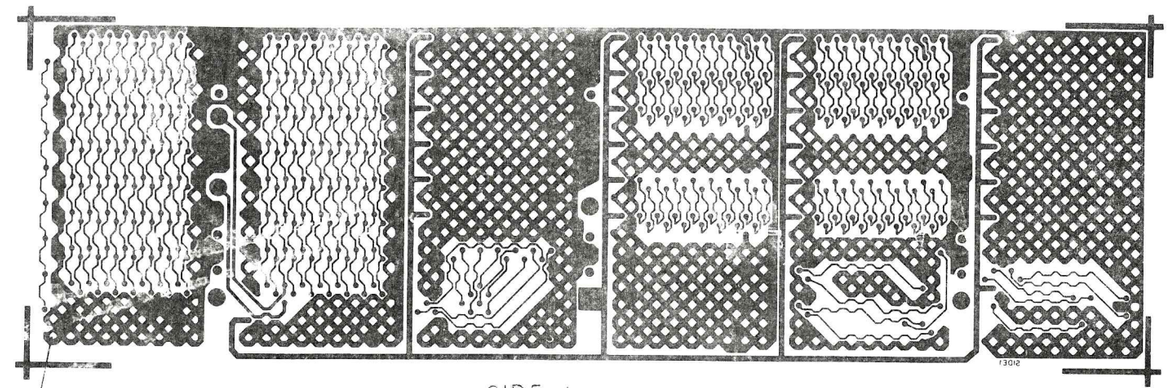
SIZE C CODE CS NUMBER 5410035-0-1 REV D

DEC FORM NO. DRC

170

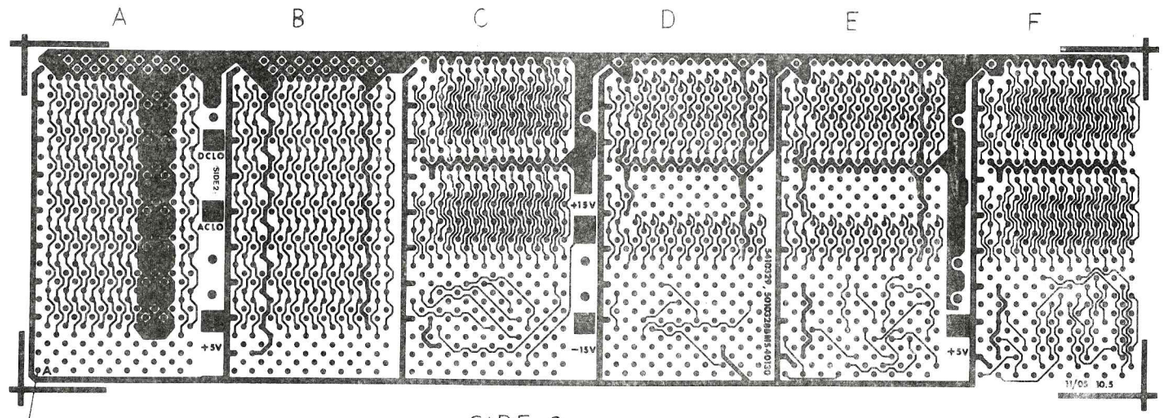
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission. COPYRIGHT © 1973
DIGITAL EQUIPMENT CORPORATION

NOTES:



SIDE 1

A01A1



SIDE 2

A01A1

IC TYPE	GND	+ 5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE		
IC PIN LOCATIONS		

BRUNING 40-522 16599
DEC FORM NO. ORD 135A

REF		ETCH WIRE LIST	K-WL-1105-0-B	5
1		ETCHED CIRCUIT BOARD	501032B	4
REF		MODULE ECO HISTORY	B-MH-5410328-0-0	3
REF		ASSY/DRILLING HOLE LAYOUT	E-AH-5410328-0-0	2
REF		X-Y COORDINATE HOLE LOCATION	K-CO-5410328-0-0	1
QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

FIRST USED ON OPTION MODEL: 1105

ETCH BOARD REV: B

REV	CHANGE NO.	DEC NO.	EIA NO.	DEC NO.	EIA NO.
CHK	REVISIONS	SEMICONDUCTOR CONVERSION CHART			

DRN. E. Wilson DATE 3/5/73
CHK'D DATE 7-20-73
ENG DATE 7-23-73
PROJ. ENG DATE 7-23-73
PROD DATE 7-23-73
NEXT HIGHER ASSY 1A-7009271-0-0
SCALE NONE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: CIRCUIT SCHEMATIC (1105 10.5)

SIZE D | CODE CS | NUMBER 5410329-0-1 | REV. A
DIST.

SIZE D | CODE CS | NUMBER 5410329-0-0 | REV.

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

ACCESSORY LIST

MADE BY E. Pellegrini DATE 5/26/72	CHECKED C. Teschner DATE 5-31-72	SECTION
ENG R.D. Weeks DATE 5-31-72	PROD R.K. Peterson DATE 5/31/72	ISSUED SECT.

LEGEND

D DOCUMENT
DN DOCUMENT CHANGE NOTICE
PA PAPER TAPE ASCII
PB PAPER TAPE BINARY
PM PAPER TAPE READ-IN-MODE

ITEM NO.	DWG NO./PART NO.	DESCRIPTION	QUANTITY/VARIATION ALL MODELS
1	7008360-0-0	CABLE ASSEMBLY	1
2	11/05-0	CUSTOMER PRINT SET	1
3	DEC-11-H05AA-A-D	MAINTENANCE MANUAL	*
4	LIBKIT 11/05 BASEA-A-K	BASIC DIAGNOSTIC KIT	*
5	LIBKIT 11/05 XBASA-A-K	SYSTEM SOFTWARE KIT	*
6	DEC-11/05(5,25) IPB	ILLUSTRATED PARTS BREAKDOWN FOR 11/05 5.25"	1
		16 BIT COMPUTER	

*NOTE: THESE ITEMS ARE TO BE SHIPPED ONLY WHEN SHOWN ON THE CONSTRUCTION REQ.

KIT CHECK BY _____ DATE _____

INSTALLATION CHECK BY _____ DATE _____

TITLE	ASSY. NO.	SIZE	CODE	NUMBER	REV.	ECO NO
PDP-11/05 ACCESSORY LIST	11/05-0-0	A	AL	11/05-0-4	A	11 [illegible]
	SHEET 1 OF 1	DIST.				

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

SOFTWARE LIST

MADE BY E. Pellegrini	CHECKED C. Teschner	SECTION
DATE 5/30/72	DATE 5-31-72	
ENG E.D. Wecks	PROD R.K. Peterson	ISSUED SECT.
DATE 5-31-72	DATE 5/31/72	

LEGEND

D	DOCUMENT
DN	DOCUMENT CHANGE NOTICE
PA	PAPER TAPE ASCII
PB	PAPER TAPE BINARY
PM	PAPER TAPE READ-IN-MODE

ITEM NO	DWG NO./PART NO.	DESCRIPTION	QUANTITY/VARIATION: ALL MODELS							KIT CHECK BY ____ DATE ____	INSTALLATION CHECK BY ____ DATE ____
1	LIBKIT 11/05 BASEA-A-K	BASIC DIAGNOSTIC KIT	*								
2	LIBKIT 11/05 XBASA-A-K	SYSTEM SOFTWARE KIT	*								
		NOTE: THESE ITEMS ARE TO BE SHIPPED ONLY WHEN SHOWN ON THE CONSTRUCTION REQ.									

TITLE: PDP-11/05 SOFTWARE LIST	ASSY. NO. 11/05-0-0	SIZE A	CODE SL	NUMBER 11/05-0-05	REV.	ECO NO
	SHEET OF	DIST.				

DEC FORM NO. DEC 16-(327)-1049-N471
DRA 120

scanned by Steve Malikoff steven@malikoff.com March 2023

digital

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS 01754

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

DRAWING DIRECTORY

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © , DIGITAL EQUIPMENT CORPORATION"

CUSTOMER PRINT SET INDEX

SEQUENCE		SEQUENCE
16 BIT COMPUTER (11/05)	B-DD-11/Ø5-Ø	
16 BIT COMPUTER (11/05)	D-UA-11/Ø5-Ø	
16 BIT COMPUTER (11/05)	C--PL-11/Ø5-Ø	
MODULE UTILIZATION (16K)	D-MU-11/Ø5-Ø-Ø2	
MODULE UTILIZATION (8K)	D-MU-11/Ø5-Ø-Ø1	
MODULE UTILIZATION (10½)	D-MU-11/Ø5-Ø-Ø7	
CENTRAL PROCESSOR	B-DD-KD11-B	
16 BIT 18MIL MEMORY	B-DD-MM11-L	
BUS TERMINATOR	D-CS-M93Ø-Ø-1	
CONSOLE ASSY	B-DD-KY11-J	
H75Ø POWER SUPPLY	B-DD-H75Ø-Ø	
LINE SET BCØ5-H	B-DD-BC05H-Ø	
LINE SET BCØ5-T	B-DD-BC05T-Ø	
LINE SET BCØ5-U	B-DD-BC05U-Ø	
INPUT HARNESS (A.C.)	E-IA-7008713-0-0	
HARNESS (D.C.)	D-IA-7008856-0-0	
BA11-D POWER TO DISTRIBUTION BOARD	E-IA-7009208-0-0	
HEADER CABLE ASSY	D-IA-7008820-0-0	
CIRCUIT SCHEMATIC	C-CS-5409949-0-1	
BERG TO BACKPLANE	C-CS-M9970-0-1	
CABLE ASSY (KL8E)	D-IA-7008360-0-0	
MAINTENANCE BOARD	D-BS-KM11-Ø-MB	
MAINT. MODULE OVERLAY (11/05-KM1)	A-SS-5509081-0-9	
MAIN. MODULE OVERLAY (11/05-KM2)	A-SS-5509081-0-10	
CIRCUIT SCHEMATIC (8K)	C-CS-5409818-0-1	
*ETCH/WIRE LIST (8K)	K-WL-7008843-1-1	
CIRCUIT SCHEMATIC (16K)	C-CS-5410035-0-1	
*ETCH/WIRE LIST (16K)	K-WL-7008843-2-1	
CIRCUIT SCHEMATIC (10½)	D-CS-5410329-0-1	
*ETCH/WIRE LIST (10½)	K-WL-11Ø5-Ø-8	
1105 ACCESSORY LIST	A-AL-11Ø5-Ø-Ø4	
1105 SOFTWARE LIST	A-SL-11Ø5-Ø-Ø5	
* 1105 ACCEPTANCE PROC.	A-SP-11Ø5-Ø-6	
*DECAL (10.5"box)	A-DC-7411305-0-0	

* ONLY INCLUDED IN MANUFACTURING PRINT SET.

THIS IS PRINT SET

UNIT VARIATIONS

VAR	TITLE	PRINT SET 11Ø5-Ø
	CONFIGURATION #1	
11Ø5-HA	KD11-B, MM11-K, 115V/60HZ	x
11Ø5-HB	KD11-B, MM11-K, 230V/50HZ	X
11Ø5-JA	KD11-B, MM11-L, 115V/60HZ	X
11Ø5-JB	KD11-B, MM11-L, 230V/50HZ	X
	CONFIGURATION #2	
11Ø5-KA	KD11-B, MM11-K, 115V/60HZ	X
11Ø5-KB	KD11-B, MM11-K, 230V/50HZ	X
11Ø5-LA	KD11-B, MM11-L, 115V/60HZ	X
11Ø5-LB	KD11-B, MM11-L, 230V/50HZ	X
	CONFIGURATION #3	
11Ø5-MA	KD11-B, MM11-K, 115V/60HZ	X
11Ø5-MB	KD11-B, MM11-K, 230V/50HZ	X
11Ø5-PA	KD11-B, MM11-L, 115V/60HZ	X
11Ø5-PB	KD11-B, MM11-L, 230V/50HZ	X
	CONFIGURATION #4	
11Ø5-NC	KD11-B, MM11-L 115V/60HZ	X
11Ø5-ND	KD11-B, MM11-L, 230V/50HZ	X

REVISIONS	REV	CHG. NO.	DATE
	P	REVISED & REDRAWN 11/05-47	8-73

DEC-16-1321-1-2-8972

DRB 106

USED ON OPTION/MODEL		DRN.	DATE
		J.CAHILL	4/19/2
		CHK'D. C.TESCHNER	DATE 4/19/2
		PROJ ENG. B.WEEKS	DATE 5/25/2
		PROD. R.PETERSON	DATE 5/25/2
		FIELD SERV. D.DICKHUT	DATE 5/25/2

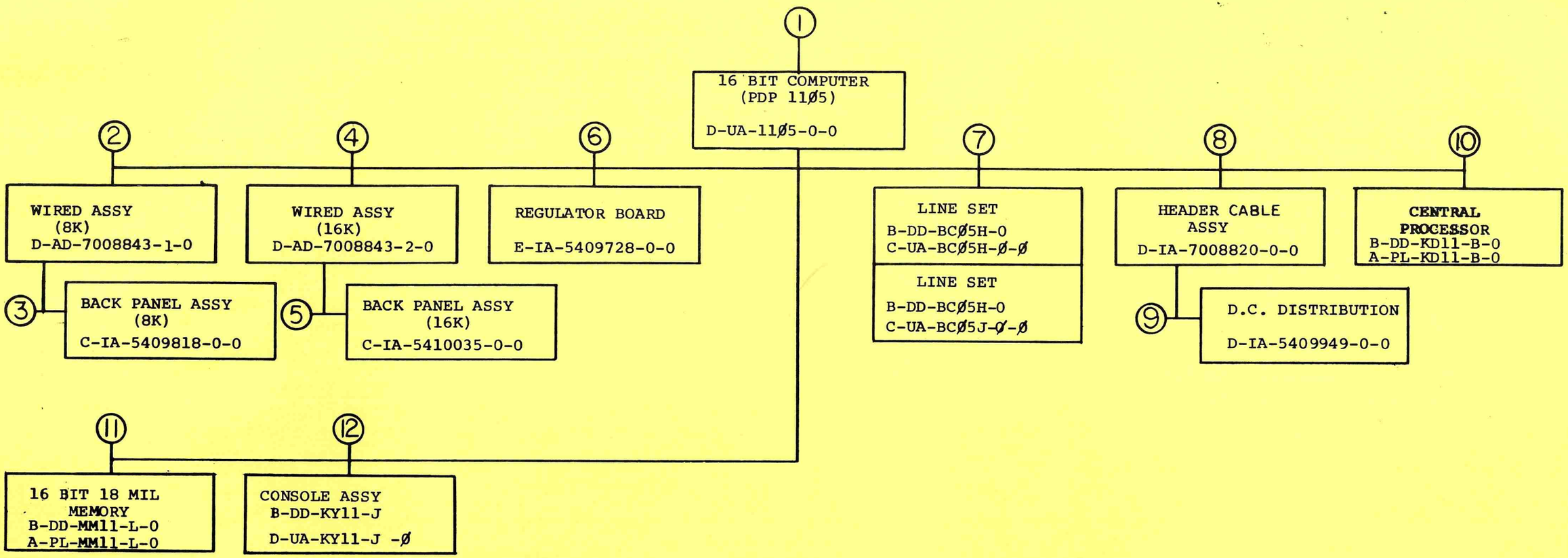
SHEET 1 OF 7

TITLE: 16 BIT COMPUTER (PDP 11Ø5)

SIZE	CODE	NUMBER	REV
B	DD	11Ø5-Ø	P

DIST

ECO No. 11/05-00047 Sheet 4 of 1K



NOTE: This sheet for 5¼" only. See sheets 6 & 7 for 10½" chassis

TITLE		SIZE	CODE	NUMBER	REV
16 BIT COMPUTER (PDP 11Ø5)	SHEET 2 OF 7	B	DD	11Ø5-Ø	P

DRB 107
DEC 16—(325)—1062—3—N871

CUSTOMER PRINT SET 11Ø5-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
			ELECTRICAL				
X	X	1	E-IA-7008713-Ø-Ø	#	1	AC INPUT HARNESS	
X	X		E-IA-7008856-Ø-Ø	#	1	HARNESS (D.C.)	
X	X		A-AL-11Ø5-Ø-Ø4	*	1	11Ø5 ACCESSORY LIST	
X	X		A-SL-11Ø5-Ø-Ø5	*	1	11Ø5 SOFTWARE LIST	
X	X		D-MU-11Ø5-Ø-Ø1	*	1	MODULE UTILIZATION (8K)	
X	X		D-MU-11Ø5-Ø-Ø2	*	1	MODULE UTILIZATION (16K)	
	X		A-SP-11Ø5-Ø-6		23	11Ø5 ACCEPTANCE PROCEDURE	
X	X		D-IA-7008360-0-0	#	1	CABLE ASSY (KL8E)	
X	X		D-BS-KM11-Ø-MB	#	3	MAINTENANCE BOARD	
X	X		A-SS-5509081-0-9	#	1	MAINT. MODULE OVERLAY (11/Ø5-KM1)	
X	X		A-SS-5509081-0-10	#	1	MAINT. MODULE OVERLAY (11/Ø5-KM2)	
X	X		D-CS-M930-0-1		1	BUS TERMINATOR	
		2	D-AD-7008843-1-0	#	1	WIRED ASSY (8K)	
	X		K-WL-7008843-1-1	#	1	ETCH/WIRE LIST (8K)	
		3	C-IA-5409818-0-0	#	1	BACK PANEL ASSY (8K)	
X	X		C-CS-5409818-0-1	#	2	CIRCUIT SCHEMATIC (8K)	
		4	D-AD-7008843-2-Ø	#	1	WIRED ASSY (16K)	
	X		K-WL-7008843-2-1	#	1	ETCH/WIRE LIST (16K)	
		5	C-IA-5410035-0-0	#	1	BACK PANEL ASSY (16K)	
X	X		C-CS-5410035-0-1	#	2	CIRCUIT SCHEMATIC (16K)	
		6	E-IA-5409728-Ø-Ø	#	1	REGULATOR BOARD	
			D-CS-5409728-0-1	#	1	CIRCUIT SCHEMATIC	
			B-MH-5409728-0-6	#	1	MODULE E.C.O. HISTORY	

CUSTOMER PRINT SET 11Ø5-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
			ELECTRICAL				
C	C	7	B-DD-BCØ5H-0	#	3	LINE SET	
			C-UA-BCØ5H-0-0	#	1	LINE SET BCØ5H (115V)	
			C-UA-BCØ5J-0-0	#	1	LINE SET BCØ5J (230V)	
X	X	8	D-IA-7008820-0-0	#	1	HEADER CABLE ASSY	
		9	D-IA-5409949-0-0	#	1	D.C. DISTRIBUTION	
X	X		C-CS-5409949-0-1	#	1	CIRCUIT SCHEMATIC	
			B-MH-5409949-0-6	#	1	MODULE E.C.O. HISTORY	
C	C	10	B-DD-KD11-B	#	1	CENTRAL PROCESSOR	
			A-PL-KD11-B-0-0	#	1	CENTRAL PROCESSOR (PL)	
C	C	11	B-DD-MM11-L	#	3	16 BIT 18 MIL MEMORY	
			A-PL-MM11-L-0-0	#	1	16 BIT 18 MIL MEMORY (PL)	
		12	B-DD-KY11-J		3	DRAWING DIRECTORY (KY11-J)	
			D-UA-KY11-J-Ø		1	CONSOLE ASSY (PDP 11Ø5)	
			A-PL-KY11-J-Ø		1	CONSOLE ASSY (PDP 11Ø5) PL.	

CUSTOMER PRINT SET CODES	
	X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
	C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
	S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

TITLE	SHEET	SIZE	CODE	NUMBER	REV
16 BIT COMPUTER (PDP 11Ø5)	3 OF 7	B	DD	11Ø5-Ø	P

ECO No. 11/05-00047 Sheet 6 of 18

CUSTOMER PRINT SET 11Ø5-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
			MECHANICAL				
X	X	1	E/D-UA-11Ø5-Ø-Ø	L	6	16 BIT (PDP 11Ø5) ASSY	
X	X		C-PL-11Ø5-Ø-Ø	L	3	16 BIT (PDP 11Ø5) ASSY (P.L.)	
			E-IA-7409458-0-0	#	4	CHASSIS	
			D-IA-7409453-0-0	#	1	FAN MOUNTING PLATE	
			A-DC-5309413-0-0	#	1	SPECIAL DECAL (UL)	
			C-IA-7411235-0-0	#	1	FILLER STRIP ASSY	
			C-IA-7410777-0-0	#	1	RET CONN BLOCK (L.H.)	
			C-IA-7410778-0-0	#	1	RET CONN BLICK (R.H.)	
			D-IA-7409459-0-0	#	1	BRKT CHASSIS SLIDE (L.H.)	
			D-IA-7409533-0-0	#	1	COVER SIDE	
			C-MD-7409460-0-0	#	1	COVER TOP	
			C-IA-7409449-0-0	#	1	BRKT CHASSIS SLIDE (R.H.)	
			C-MD-7409591-0-0	#	1	CLAMP	
			C-PS-1210698-0-0	#	1	GUIDE CARD CENTER	
			D-PS-1210931-0-0	#	1	BLOCK CABLE RETAINER	
			D-MD-7409432-0-0	#	1	PLATE LOWER RETAINER	
			C-MD-7409430-0-0	#	1	NUT SWIVEL	
			C-MD-7409479-0-0	#	1	PLATE PRESSURE	
			D-IA-7008856-0-0	#	1	HARNESS DC	
			E-IA-7008713-0-0	#	1	AC INPUT HARNESS	
			A-AL-11Ø5-Ø-Ø4	#	1	11Ø5 ACCESSORY LIST	
			A-SL-11Ø5-Ø-Ø5	#	1	11Ø5 SOFTWARE LIST	
			A-PI-3700061-0-0	#	2	PACKAGING INSTRUCTION	
			B-MD-7409817-0-0	#	1	PLATE CABLE CLAMP	
			B-MD-7409816-0-0	#	1	SHIPPING BRACKET	
			C-MD-7409818-0-0	#	1	BRACKET CABLE CLAMP	
			B-IA-7409729-0-0	#	1	JUMPER POWER	
			D-PS-1210945-0-0	#	4	SLIDES	
			B-IA-7409903-0-0	#	1	JUMPER POWER	
			D-IA-7409533-1-0	#	1	COVER SIDE	
			E-IA-5309816-0-0	#	1	CHASSIS POWER SUPPLY	
			D-IA-7008726-0-0	#	1	TRANSFORMER ASSY	
			A-DC-5309414-0-0	#	1	SPECIAL DECAL (UL)	
		2	D-AD-7008843-1-0	#	1	WIRED ASSY (8K)	

CUSTOMER PRINT SET 11Ø5-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
			MECHANICAL				
		3	C-IA-5409818-0-0	#	1	BACK PANEL ASSY (8K)	
			D-AH-5409818-0-5	#	1	ASSY/DRILLING HOLE	
			K-CO-5409818-0-4	#	1	X-Y CO-ORDINATE HOLE LOCATION	
			E-PS-1210258-0-0	#	1	288 PIN CONN (H863)	
			D-PS-1210834-0-0	#	1	360 PIN CONN	
			C-PS-1210932-0-0	#	1	CONNECTOR GUIDE	
			E-PS-1210991-0-0	#	1	11Ø5 LOGIC FRAME	
		4	D-AD-7008843-2-0	#	1	WIRED ASSY (16K)	
			D-MD-5010051-0-0	#	1	SHEET PROTECTION	
		5	C-IA-5410035-0-0	#	1	BACK PANEL ASSY (16K)	
			D-PS-1210834-0-0	#	1	360 PIN CONN BLOCK	
			E-PS-1210258-0-0	#	1	288 PIN CONN (H863)	
			D-AH-5410035-0-5	#	1	ASSY/DRILLING HOLE	
			K-CO-5410035-0-4	#	1	X-Y CO-ORDINATE HOLE LOCATION	
			C-PS-1210932-0-0	#	1	CONNECTOR GUIDE	
			E-PS-1210991-0-0	#	1	11Ø5 LOGIC FRAME	
		6	E-IA-5409728-0-0	#	1	REGULATOR BOARD	
			K-CO-5409728-0-4	#	1	X-Y CO-ORDINATE HOLE LAYOUT	
			C-MD-5309779-0-0	#	1	CONTACT COMMON CAPACITOR	
			C-MD-5309781-0-0	#	1	CONTACT CAPACITOR	
			C-IA-5310126-0-0	#	1	HOLDER CAPACITOR	
			D-PS-1210596-0-0	#	1	HEAT SINK	
		7	B-DD-BCØ5H-0	#	3	LINE SET	
			C-UA-BCØ5H-Ø-Ø	#	1	LINE SET BCØ5H (115)	
			C-UA-BCØ5J-Ø-Ø	#	1	LINE SET BCØ5J (230)	

CUSTOMER PRINT SET CODES

X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

TITLE		SIZE	CODE	NUMBER	REV
16 BIT COMPUTER (PDP 11Ø5)	SHEET 4 OF 7	B	DD	11Ø5-Ø	P

ECO No. 11Ø5-00047 Sheet 7 of 18

CUSTOMER PRINT SET 11Ø5-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
			MECHANICAL				
		8	D-IA-7008820-0-0	#	1	HEADER CABLE ASSY	
		9	D-IA-5409949-0-0	#	1	D.C. DISTRIBUTION	
			K-CO-5409949-0-4	#	1	X-Y CO-ORDINATE HOLE LOCATION	
			D-AH-5409949-0-5	#	1	ASSY/DRILLING HOLE LAYOUT	
		10	B-DD-KD11-B	#	1	CENTRAL PROCESSOR	
			A-PL-KD11-B-0-0	#	1	CENTRAL PROCESSOR (PL)	
		11	B-DD-MM11-L	#	3	16 BIT 18 MIL MEMORY	
			A-PL-MM11-L-0-0	#	1	16 BIT 18 MIL MEMORY (PL)	
C	C	12	B-DD-KY11-J		3	DRAWING DIRECTORY (KY11-J)	
			D-UA-KY11-J-Ø		1	CONSOLE ASSY (PDP 11Ø5)	
			A-PL-KY11-J-Ø		1	CONSOLE ASSY (PDP 11Ø5) P.L.	

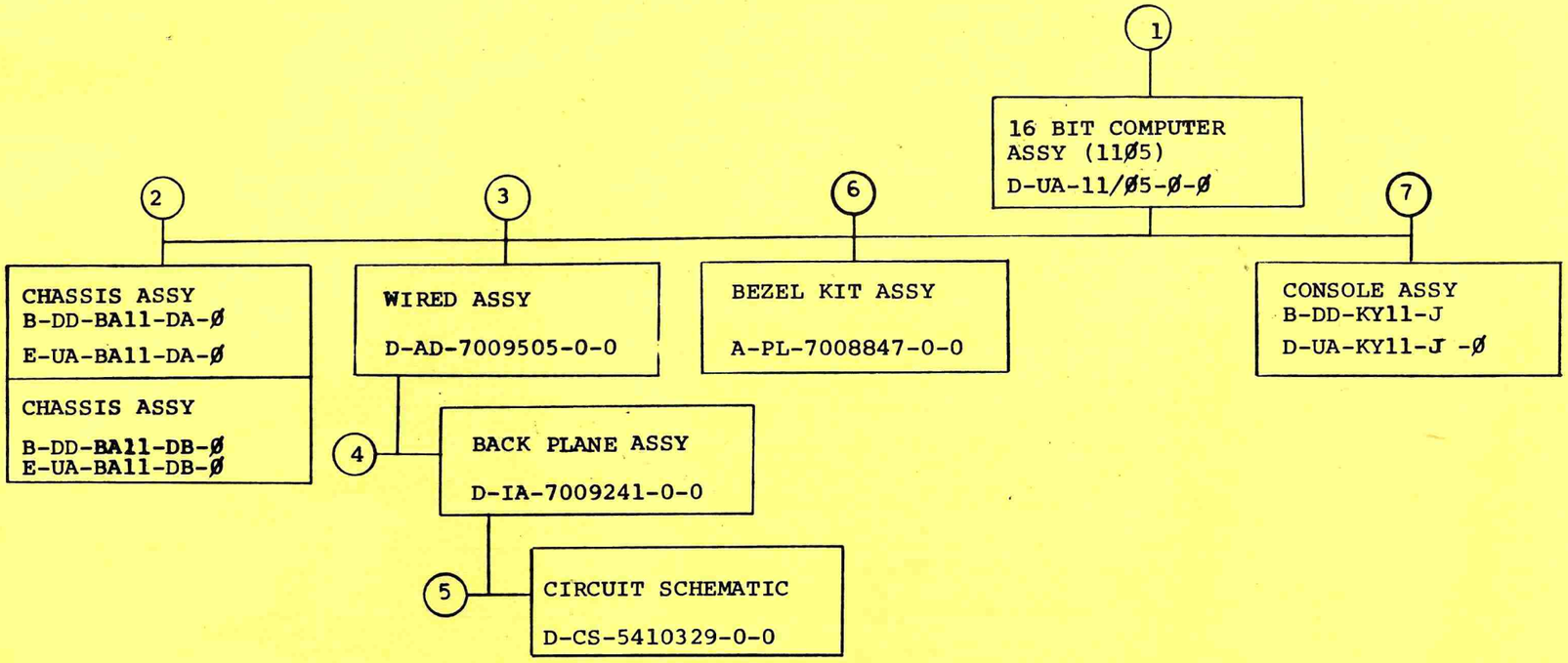
CUSTOMER PRINT SET CODES	
	X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
	C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
	S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

CUSTOMER PRINT SET 11Ø5-Ø	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
			MECHANICAL				

TITLE	SHEET	SIZE	CODE	NUMBER	REV
16 BIT COMPUTER	5 OF 7	B	DD	11Ø5-Ø	P

DRB 108

DEC 16-(325)-1062-2B-R972



NOTE: SHEETS 6 & 7 ARE FOR 10.5 BOX ONLY.

TITLE		SIZE	CODE	NUMBER	REV
16 BIT COMPUTER (PDP11Ø5)	SHEET 6 OF 7	B	DD	11Ø5-Ø	P

DRB 107
DEC 16—(325)—1062—3—N871

scanned by Steve Malikoff steven@malikoff.com March 2023

ECO No. 11/05-00047 Sheet 9 of 18

ELECTRICAL

CUSTOMER PRINT SET 11Ø5-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		1	D-UA-11/Ø5-Ø-Ø		7	16 BIT COMPUTER ASSY (11Ø5)	
X	X		D-IA-7009360-0-0		1	CPU POWER HARNESS	
X	X		D-MU-11Ø5-Ø-Ø7		1	MODULE UTILIZATION (10.5)	
X	X		C-CS-M9970-0-1		1	BERG TO BACK PLANE	
		2	B-DD-BA11-D		2	DRAWING DIRECTORY (BA11-D)	
			E-UA-BA11-D-Ø		2	CHASSIS ASSY	
		3	D-AD-7009505-0-0		1	WIRED ASSY	
			C-PS-1210698-0-0		1	CARD GUIDE	
	X		K-WL-1105-0-8		1	ETCH/WIRE LIST (10½)	
		4	D-IA-7009241-0-0		1	BACK PLANE ASSY	
			5010328		1	ETCH CIRCUIT BOARD	
X	X	5	D-CS-5410329-Ø-1		1	CIRCUIT SCHEMATIC (11Ø5 10.5)	
			K-CO-5410329-Ø-4		1	X-Y COORDINATE HOLE LOCATION	
			E-AH-5410329-Ø-5		1	ASSY/DRILLING HOLE LAYOUT	
			B-MH-5410329-Ø-6		1	MODULE ECO HISTORY	
			5010328		1	ETCH CIRCUIT BOARD	

MECHANICAL

CUSTOMER PRINT SET 11Ø5-Ø	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		1	D-UA-11/Ø5-Ø-Ø		7	16 BIT COMPUTER ASSY (11Ø5)	
			D-IA-7009360-0-0		1	CPU POWER HARNESS	
			D-MD-7410664-0-0		1	CONSOLE MTG BRKT (10.5)	
			A-PI-370098-0-0			PACKAGEING INST.	
			B-IA-7409729-0-0		1	JUMPER POWER	
C	C		B-DD-H75Ø-Ø			H75Ø POWER SUPPLY	
C	C		B-DD-BC05-T			LINE SET BC05-T	
C	C		B-DD-BC05-U			LINE SET BC05-U	
X	X		E-IA-7009208-0-0		1	DISTRIBUTION BOARD HARNESS (BA11-D)	
	X		A-DC-7411305-0-0			DECAL (10.5" MODULE UTILIZATION)	
		2	B-DD-BA11-D		2	DRAWING DIRECTORY (BA11-D)	
			E-UA-BA11-D-Ø		2	CHASSIS ASSY	
		4	D-IA-7009241-0-0		1	BACK PLANE ASSY	
			5010328		1	ETCH CIRCUIT BOARD	
		5	D-CS-5410329-Ø-1		1	CIRCUIT SCHEMATIC (11Ø5 10.5)	
		6	A-PL-7008847-0-0		1	BEZEL KIT ASSY	
			D-IA-7409683-0-0		1	BEZEL	
			A-PS-1211221-0-0		1	STRIP MTG	
		7	B-DD-KY11-J		3	DRAWING DIRECTORY (KY11-J)	
			D-UA-KY11-J-Ø		1	CONSOLE ASSY (PDP11Ø5)	
			A-PL-KY11-J-Ø		1	CONSOLE ASSY (PDP11Ø5) PL	

CUSTOMER PRINT SET CODES	
	X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
	C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
	S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

TITLE		SIZE	CODE	NUMBER	REV
16 BIT COMPUTER (PDP11Ø5)	SHEET 7 OF 7	B	DD	11Ø5-Ø	P

DRB 108

DEC 16-(325)-1062-2B-R972

ECO No. 11Ø5-00047 Sheet 10 of 18

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission. 1973

ITEM NO.	DWG. NO./PART NO.	DESCRIPTION	QUANTITY / VARIATION																	
			11Ø5-FA	11Ø5-FB	11Ø5-FE	11Ø5-FF	11Ø5-HA	11Ø5-HB	11Ø5-JA	11Ø5-JB	11Ø5-KA	11Ø5-KB	11Ø5-LA	11Ø5-LB	11Ø5-MA	11Ø5-MB	11Ø5-PA	11Ø5-PB	11Ø5-NC	11Ø5-ND
1	C-IA-7411235-Ø-Ø	1.75 FILLER STRIP	1	1	1	1	1	1	1	1	1	1	1	1	X	X	X	X	I	I
2	D-UA-KY11-JA-Ø	CONSOLE ASSY	X	X	X	X	1	1	1	1	1	1	1	1	X	X	X	X	X	X
3	C-MD-7409460-Ø-Ø	COVER, TOP	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
4	E-IA-7409458-Ø-Ø	CHASSIS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
5	D-IA-7409459-Ø-Ø	BRACKET,CHASSIS SLIDE (L.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
6	1209403	FAN, SUPER BOXER	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
7	E-PS-1211100-0-0	CARD GUIDE ASSY (L.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
8	D-AD-7008843-1-Ø	BACK PANEL ASSY (8K)	1	1	1	1	X	X	X	X	1	1	1	1	X	X	X	X	X	X
9	D-AD-7008843-2-Ø	BACK PANEL ASSY (16K)	X	X	X	X	1	1	1	1	X	X	X	X	X	X	X	X	X	X
10	9009191	SCR PHL HD PAN NYLOK *8-32 x 1/4 LG	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	X	X
11	D-IA-7008856-Ø-Ø	HARNESS (D.C.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
12	C-IA-7410777-0-0	RET. CONN. BLOCK (L.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
13	C-UA-BCØ5H-Ø-Ø	LINE SET BCØ5H (115V/60HZ)	1	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	X	X
14	C-UA-BCØ5J-Ø-Ø	LINE SET BCØ5J (230V/50HZ)	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	X
15	C-IA-7409449-Ø-Ø	BRACKET,CHASSIS SLIDE (R.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
16	E-IA-7008713-Ø-Ø	AC INPUT HARNESS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
17																				
18	E-PS-1211099-0-0	CARD GUIDE ASSY (R.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
19	C-IA-7410778-Ø-Ø	RET. CONN. BLOCK (R.H.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
20	D-IA-7409463-Ø-Ø	FAN MTG PLATE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
21	C-MD-7409479-Ø-Ø	PLATE, PRESSURE	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
22	9006047-1	SCR PHL HD PAN *8-32 x 2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
23	D-PS-1210931-Ø-Ø	BLOCK, CABLE RETAINING	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
24	C-MD-7409480-Ø-Ø	SWIVEL NUT	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
25	D-MD-7409482-Ø-Ø	PLATE LOWER RETAINER	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
26	9006024-1	SCR PHL HD PAN *6-32 x 1/2	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
27	9009165	FAN CLIP	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
28	C-PS-1210698-Ø-Ø	GUIDE CARD CENTER	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
29	C-IA-7008820-Ø-Ø	HEADER CABLE ASSY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
30	9006074-3	SCR PHL HD TRUSS #10-32 x 5/8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
31	9009186	SCR PHL HD PAN NYLOC #6-32 x 5/16	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
32	9006071-3	SCR PHL HD TRUSS #10-32 x 3/8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
33	9007651	WASHER EXT TOOTH #10	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
34	D-IA-7409533-Ø-Ø	COVER SIDE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
35	C-MD-7409591-Ø-Ø	CLAMP	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
36	9009173	SCR BINDER HD NYLON #8-32 x 1/4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
37	9008074	SPACER 1/2" AF x 5/16-#10	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
38	1210945	CHASSIS SLIDE	X	1	1	1	1	1	1	1	1	1	1	1	X	X	X	X	X	X
39	9008196	CLIP-ON RECPT.-SOUTHCO #82-47-104-15	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
40	D-MU-11Ø5-Ø1-0	MODULE UTILIZATION (8K)	1	1	1	1	X	X	X	X	1	1	1	1	1	1	1	1	X	X
41	D-MU-11Ø5-Ø2-0	MODULE UTILIZATION (16K)	X	X	X	X	1	1	1	1	X	X	X	X	X	X	X	X	X	X
42	9009192	SCR PHL HD PAN NYLOC #8-32 x 3/8	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
43	9006005-1	SCR PHL HD PAN #2-56 x 1/2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X

REVISIONS	CHANGE NO.	REV.
CHK.	11/05-00040	F
DM	REVISED & REDRAWN 1-24-72 S. Lodgson	
	M. TITLEBAUM	
DM	1105-00041	H
	Dana M. Hanchett 2-7-73	
	G. GRAHAM	
	G. Graham 2-8-73	
DM	11/05-00044	J
	S. Chastain 5-23-73	
	G GRAHAM	
DM	11/05-00046A	K
	S. Chastain 6-4-73	
	GRAHAM	
DM	1105-00047A	L
	G. Graham 7-27-73	
	D.RANDALL	
DM		
	S. Gilbert 8-17-73	
	D.RANDALL	
DM		
	D. Randall 8-30-73	

FIRST USED ON OPTION/MODEL
11/Ø5

UNLESS OTHERWISE SPECIFIED
UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

DRN.	J. CAHILL	DATE 2/25/2
CHK'D.	C. TESCHNER	DATE 5/2/2
ENG.	A. LYONS	DATE 5/15/2
PROJ. ENG.	B. WEEKS	DATE 5/16/2
PROD.	R. PETERSON	DATE 5/16/2

NEXT HIGHER ASSY.
D-UA-1105-0-0
SCALE
SHEET 1 OF 3

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
16 BIT COMPUTER
ASSY (PDP 11Ø5)

SIZE	CODE	NUMBER	REV.
C	PL	11Ø5-0-0	L

DIST.

DEC FORM NO. DRC 110

REV. L
NUMBER 11Ø5-0-0
SIZE C CODE PL

ECO No. 11/05-00047 Sheet 11 of 18

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission. 1973

ITEM NO.	DWG. NO./PART NO.	DESCRIPTION	QUANTITY / VARIATION																	
			1105-FA	1105-FB	1105-FE	1105-FF	1105-HA	1105-HB	1105-JA	1105-JB	1105-KA	1105-KB	1105-LA	1105-LB	1105-MA	1105-MB	1105-PA	1105-PB	1105-NC	1105-ND
44	9006631	WASHER INT TOOTH #2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
45	9008442	CABLE CLAMP (1/4)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
46	9009210-6	SCOTCH BRAND ADHESIVE TRANSFER TAPE	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	X	X
47																				
48	7409729-01	JUMPER POWER (BLACK)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
49	7409729-02	JUMPER POWER (RED)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
50	9009224	SCR SLOT PAN HD #8-32 x 1/4 LG	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	X	X
51	A-DC-5309900-0-0	POWER CONTROL DECAL (230V)	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	X
52	A-DC-5309899-0-0	POWER CONTROL DECAL (115V)	1	X	1	X	1	X	1	X	1	X	1	X	1	X	1	X	X	X
53	B-MD-7409816-0-0 *	SHIPPING BRACKET	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
54	9008143-1	SCR PHL HD PAN #8-32 X 1/4 THD CUTTING	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
55	B-MD-7409817-0-0	PLATE, CABLE CLAMP	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
56	C-MD-7409818-0-0	BRACKET CABLE CLAMP	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
57	9006011-2	SCR PHL HD FLAT #4-40 X 3/8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
58	B-MD-7409828-0-0	BRACKET	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
59	9007694	QUIK DISCONNECT	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
60	7409903	JUMPER POWER (BLACK)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
61	D-UA-KY11-JC-0	CONSOLE ASSY	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	1	X	X
62	D-MD-7409978-0-0	BOTTOM TRIM	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	1	X	X
63	D-AD-7009119-0-0	BACK PANEL ASSY	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	1	X	X
	* USED ONLY WHEN INSTALLED IN CABINET																			
64	D-IA-7409533-1-0	COVER SIDE	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	1	X	X
65	1700021-0	ELECTROMAGNETIC SHIELD 1 OZ. CU	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	1	1
66	E-IA-5309816-0-0	CHASSIS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
67	D-IA-7008726-0-0	TRANSFORMER MMC 415° -1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
68	9006024-1	SCR PHL PAN HD #6-32 X.50 LG	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
69	9006021-1	SCR PHL PAN HD #6-32 X.31LG	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
70	9006031-1	SCR PHL PAN HD #6-32 X1.75 LG	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
71	9006563	NUT KEPS #8-32	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
72	9006560	NUT KEPS #6-32	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	X	X
73	9007649	WASHER EXT. LOCK #6-32	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
74	9007035	GROMMET CATERPILLAR	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	A/R	X	X
75	E-IA-5409728-0-0	REGULATOR BOARD	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
76	D-UA-KY11-JF-0	CONSOLE ASSY	1	1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
77	A-DC-5309413-0-0	SPECIAL DECAL (UL)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
78	A-DC-5309414-0-0	SPECIAL DECAL (UL)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
79	9008181-1	SCR PHL PAN HD TYPE F 6-32 X .50LG	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
80	9009525-1	SCR, PHL PAN HD TYPE F 6-32 X .37LG	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
81	9009070	SCRPHL FLAT HD SPECIAL 8-32X.81LG	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	X	X
82	9009543	FOAM 3/8 X 1 X3 3/4LG	1	1	1	1	1	1	1	1	1	1	1	–	–	–	–	–	X	X
83	9009542	FOAM ½ X 5/16 X7 9/16LG	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
84	9009544	FOAM ½ X ¼ X 16½LG	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
85	9008848	FIBER WASHER 5/32ID X ½ OD X 3/32	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	X	X
86	A-DC-7411255-0-0	LABEL (REMOVE FOAM)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X

REVISIONS | REV. | CHANGE NO. | CHK

FIRST USED ON OPTION/MODEL
11/05

UNLESS OTHERWISE SPECIFIED
UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

		DATE
DRN.	J. CAHILL	2/25/2
CHK'D.	C. TESCHNER	5/2/2
ENG.	A. LYONS	5/15/2
PROJ. ENG.	B. WEEKS	5/16/2
PROD.	R. PETERSON	5/16/2

NEXT HIGHER ASSY.
D-UA-1105-0-0

SCALE

SHEET 2 OF 3

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
16 BIT COMPUTER
ASSY (PDP 1105)

SIZE	CODE	NUMBER	REV.
C	PL	1105-0-0	L

DIST.

REV. L
NUMBER 1105-0-0
SIZE C CODE PL

DEC FORM NO. DRC 110

ECO No. 11/05 - 00047 Sheet 12 of 18

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

ITEM NO.	DWG. NO./PART NO.	DESCRIPTION	1105-FA	1105-FB	1105-FE	1105-FF	1105-HA	1105-HB	1105-JA	1105-JB	1105-KA	1105-KB	1105-LA	1105-LB	1105-MA	1105-MB	1105-PA	1105-PB	1105-NC	1105-NB
			QUANTITY / VARIATION																	
87	9ØØ6635	WASH INT TOOTH #10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	10	10
88	9ØØ6Ø43-1	SCR PHL HD PAN #8-32 x 1.0 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4	4
89	9ØØ6Ø35-1	SCR PHL HD PAN #8-32 x .25 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4	4
90	D-MU-1105-Ø-Ø7	MODULE UTILIZATION (16K)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
91	D-UA-7ØØ95Ø5-Ø-Ø	WIRED ASSY	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
92	B-IA-74Ø9729-Ø3	JUMPER POWER (BLK)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
93	B-IA-74Ø9729-Ø4	JUMPER POWER (RED)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
94	9ØØ8264	CLAMP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4	4
95	9ØØ7Ø33	TIE WRAP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2	2
96	9ØØ7649	WASH EXT TOOTH #6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2	2
97	9ØØ6Ø2Ø-1	SCR PHL HD PAN #6-32 x .1/4 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2	2
98	E-UA-BA11-DA-Ø	CHASSIS ASSY (115V)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	X
99	E-UA-BA11-DB-Ø	CHASSIS ASSY (230V)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1
100	D-UA-KY11-JD-Ø	CONSOLE ASSY	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
101	9ØØ8442	TIE WRAP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	8	8
102	9ØØ6634	WASHER INT TOOTH #8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	8	8
103	A-PL-7ØØ8847-Ø-Ø	BEZEL KIT ASSY	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
104	9ØØ6Ø71-1	SCR PHL HD PAN #10-32 x .38 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	6	6
105	D-MD-741Ø664-Ø-Ø	CONSOLE MTG BRK'T (10.5)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
106	D-IA-7ØØ936Ø-Ø-Ø	CPU POWER HARNESS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1
107	9ØØ6Ø7Ø-1	SCR PHL HD PAN #10-32 x .31 LG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4	4
108	A-DC-7411305-0-0	DECAL (10 1/2" MODULE UTILIZATION)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1

REVISIONS | REV. | CHANGE NO. | CHK

FIRST USED ON OPTION/MODEL
1105

UNLESS OTHERWISE SPECIFIED
UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

DRN.	J.CAHILL	DATE 2/25/2
CHK'D.	C.TESCHINER	DATE 5/2/72
ENG.	A.LYONS	DATE 5/15/2
PROJ. ENG.	B.WEEKS	DATE 5/16/2
PROD.	R.PETERSON	DATE 5/16/2

NEXT HIGHER ASSY.
B-DD-1105-Ø

SCALE

SHEET 3 OF 3

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
16 BIT COMPUTER
ASSY (PDP1105)

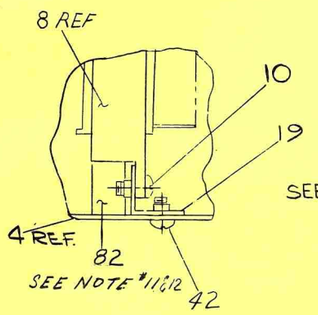
SIZE	CODE	NUMBER	REV.
C	PL	1105-Ø-Ø	L

DIST.

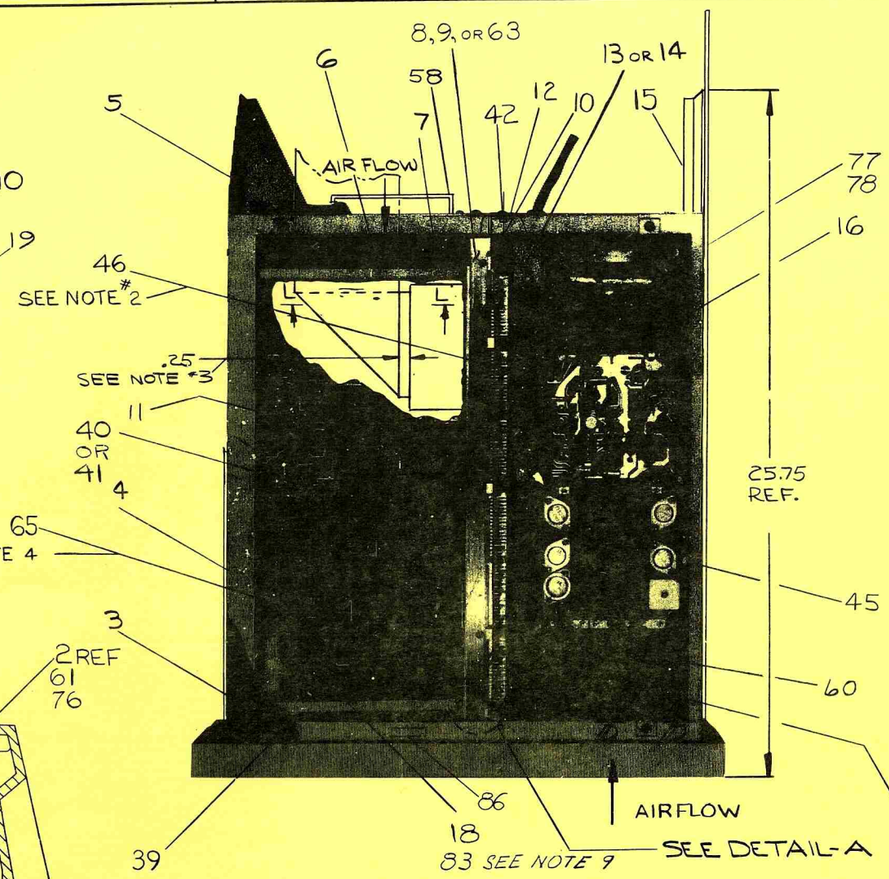
DEC FORM NO. DRC 110

ECO No. 11/05-00047 Sheet 13 of 18

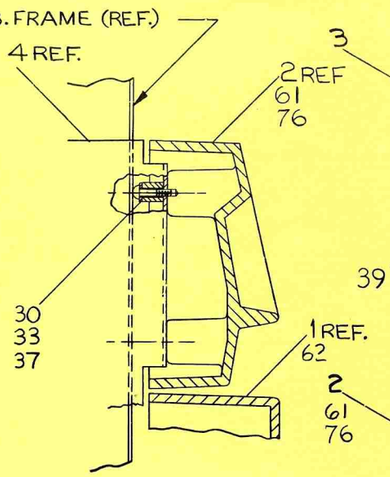
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission. 1972



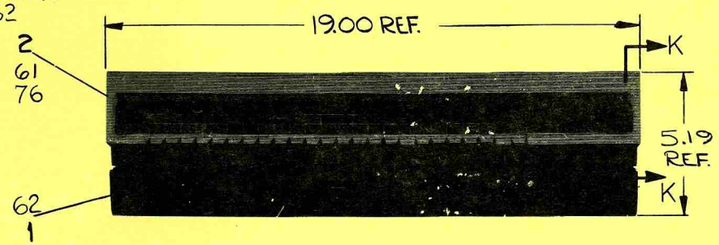
DETAIL-A



PLAN VIEW



SECTION K-K



FRONT VIEW

WIRE TABLE

PART NO.	COLOR	FROM HARNESS LEAD NO.	TO SYSTEM LOCATION	REMARKS
7008713	RED	J1	51-2	VIEW E-E
	RED	J2	51-1	
	VIO	J3	51-6	
	BLK	J4	51-5	
	RED	J12	H790 P.S. J3	THERMAL INTERLOCK
	RED	J11	H790 FAN	P.S. FAN TAB
	WHT	J10	H790 FAN	P.S. FAN TAB
		J6	P9	BACK OF CHASSIS
		J5	P8	BACK OF CHASSIS
		J9	TRANSFORMER P5	VIEW H-H
		P1	A.C. INPUT BOX J13	A.C. INPUT BOX
	RED	J7	11/05 FAN	CHASSIS FAN
7008713	WHT	J8	11/05 FAN	CHASSIS FAN
7008856		P1	H790 P.S. J2	P.S. MATE-N-LOCK
	VIO	8	BP-1	VIEW F-F
	RED	9	BP-3	
	YEL	10	BP-2	
	BLK	11	BP-4	
	BLU	12	BP-5	
	ORN	13	LOGIC POINT C@U1	+15
	BRN	14	LOGIC POINT C@U1 P1	C+C LO
	BLK	15	BP-6	VIEW F-F
7008856	RED	16	BP-7	
		TRANSFORMER P2	H740 P/S J1	VIEW H-H & POWER CARD TO TRANSFORMER
7409729-2	RED	B.P.-7	CONSOLE-+5	CONSOLE TO BACK PLANE & VIEW D-D
7409729-1	BLK	B.P.-6	CONSOLE-GND	CONSOLE TO BACK PLANE & VIEW D-D
7409903	BLK	B.P.-6	BACK PLANE-GND	BACK PLANE TO CHASSIS-DETAIL-A

THIS CONNECTION IS SHOWN 90° OUT OF POSITION FOR CLARITY.

NOTES:

1. INSTALLATION OF I/Ø CABLE, WHICH IS ALREADY CONNECTED TO ITEM #(2), CONSOLE ASSY, IS AS FOLLOWS. RUN I/Ø CABLE DOWN INNER SIDE OF ITEM #(18) CARD GUIDE ASSY SLIDE CABLE THROUGH OPENING ON BOTTOM OF ITEM #(18) CARD GUIDE ASSY, TO ONE OF THE THREE EXIT LOCATIONS FOR THE CABLE, AFTER EXIT LOCATION IS DECIDED, FOLD CABLE 90° AND HOLD IN PLACE BY USING ITEM # 35 (CLAMP) AND ITEM #46 (TAPE) AS SHOWN IN VIEW C-C.
2. USE TAPE (ITEM #46) TO HOLD HEADER CABLE ASSY TO CHASSIS.
3. FOLD CABLE 90° AS SHOWN TO INSURE CORRECT LOCATION IN CABLE CLAMP.
4. ITEM # 65 (ELECTROMAGNETIC SHIELD) GOES BETWEEN CENTRAL PROCESSOR BOARDS & MEMORY BOARDS.
5. THE 6 PIN MATE-N-LOCK CONN (MALE) ON TRANSFORMER (ITEM # 67) IS TO REMAIN ON FLOOR OF CHASSIS.
6. CONNECT 3 PIN-MATE-N LOCK CONN. (FEMALE) ON TRANSFORMER (ITEM # 67) TO 3 PIN MATE-N-LOCK CONN. (MALE) ON REGULATOR BOARD (ITEM # 75) (SECTION P-P).
7. 2 PIN MATE-N-LOCK TO BE SECURED TO HEAT SINK FOR HANDLING.
8. ITEMS #79 & 80 (THREAD CUTTING SCREWS) MUST BE ASSEMBLED USING A TORQUE SCREW DRIVER. SCREWS WILL BE ATTACHED USING 8 INCH POUNDS OF TORQUE.
9. ADHERE FOAM (9009542) TO TOP OF CARD GUIDE (#2110991)
10. ADHERE FOAM (9009544) TO INSIDE OF COVER (7409460)
11. ADHERE FOAM (9009543) TO END OF LOGIC FRAME
12. DO NOT ADD ITEM #82 TO VARIATIONS MA, MB, PA, PB.

REVISIONS			
CHK	CHANGE NO.	REV.	
PM	11/05-00017	A	LYONS
PM	11/05-00030	B	M. TITELBAUM
PM	11/05-00034	C	Beasley
PM	11/05-00035	D	Beasley
PM	11/05-00040	F	G. GRAHAM
PM	11/05-00039	E	Beasley
			R.L. GATES
PM	11/05-00041	H	M. TITELBAUM
PM	11/05-00044	J	G. GRAHAM
PM	11/05-00046A	K	GRAHAM
PM	11/05-00047	L	GRAHAM
	ADDED SHEETS 5&6		D. RANDALL

DEC FORM NO. DIED 169-A

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP 11Ø5		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS .XXX = .005 .XX = .02 .X = .1 ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

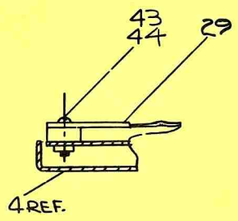
DRN. [signature] DATE 2-24-72
CHK'D. J. Teschner DATE 4-14-72
ENG. Alan Lyons DATE 5-15-72
PROJ. ENG. [signature] DATE 5-16-72
PROD. R.K. Peterson DATE 5/17/72

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: 16 BIT COMPUTER ASSY (PDP 11Ø5)

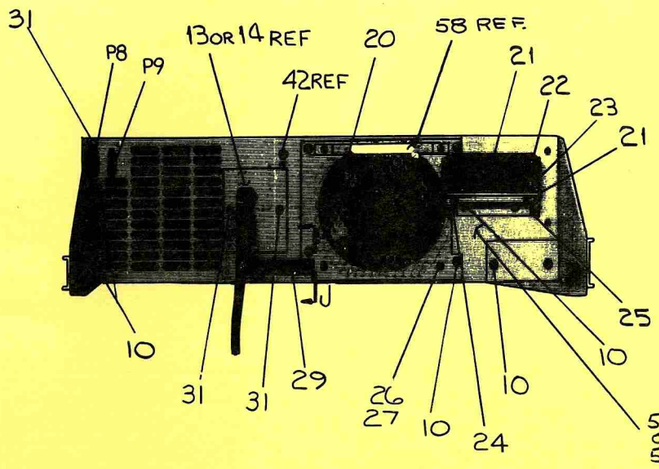
NEXT HIGHER ASSY. B-DD-11Ø5-Ø
SCALE NONE
SHEET 1 OF 6
SIZE D CODE DUA NUMBER 11Ø5-Ø-Ø REV. L
DIST.

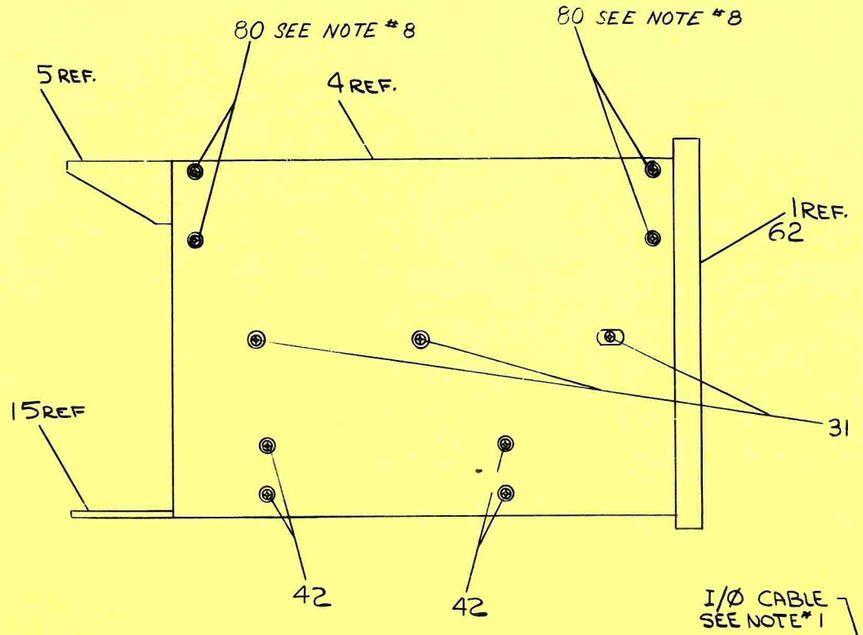
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.
1972



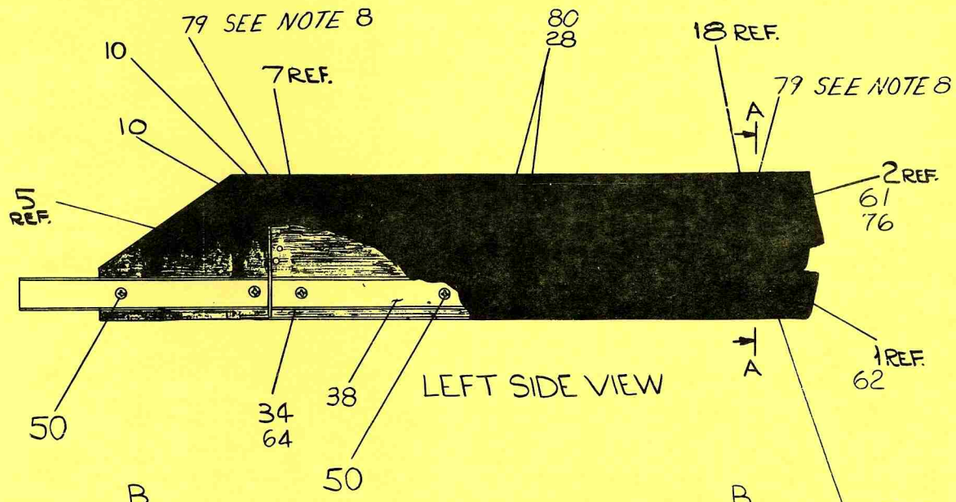
SECTION J-J

REAR VIEW

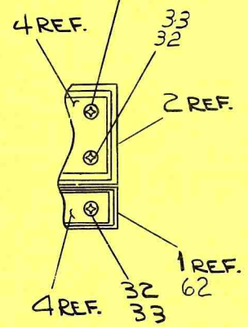




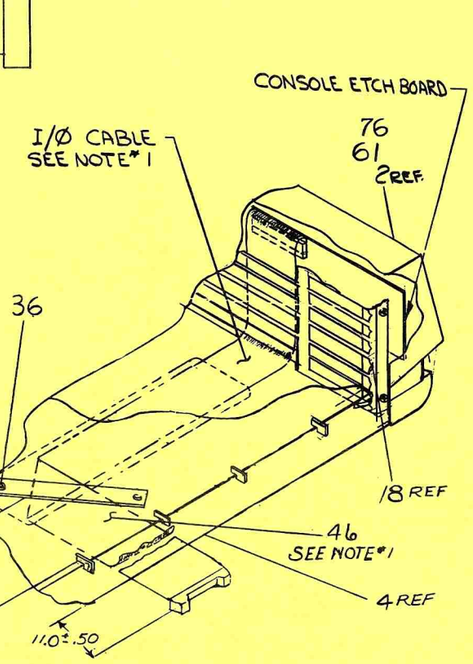
VIEW B-B



LEFT SIDE VIEW



VIEW A-A



VIEW C-C

REVISIONS		
CHK	CHANGE NO.	REV.
		-1

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PDP 1105		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES
DECIMALS .XXX = .005 .XX = .02 .X = .1 ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓
MATERIAL —
FINISH —

DRN.		DATE 8-24-72
CHKD.	C. Teschner	DATE 9-14-72
ENG.	Allan Lyons	DATE 5-15-72
PROJ. ENG.	R. D. Wicks	DATE 5-16-73
PROD.	R. K. Peterson	DATE 5/16/72

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: 16 BIT COMPUTER ASSY (PDP1105)

NEXT HIGHER ASSY. B-DD-1105-Ø

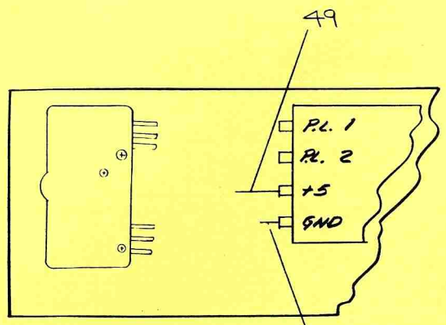
SIZE	CODE	NUMBER	REV.
D	UA	1105-Ø-Ø	L

SCALE NONE
SHEET 2 OF 6
DIST. G

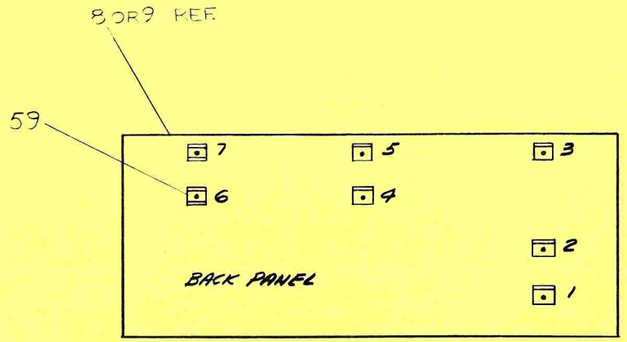
SIZE	CODE	NUMBER	REV.
D	UA	1105-Ø-Ø	L

DEC FORM NO. DRD 100-A

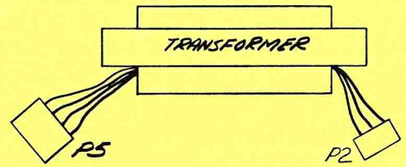
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



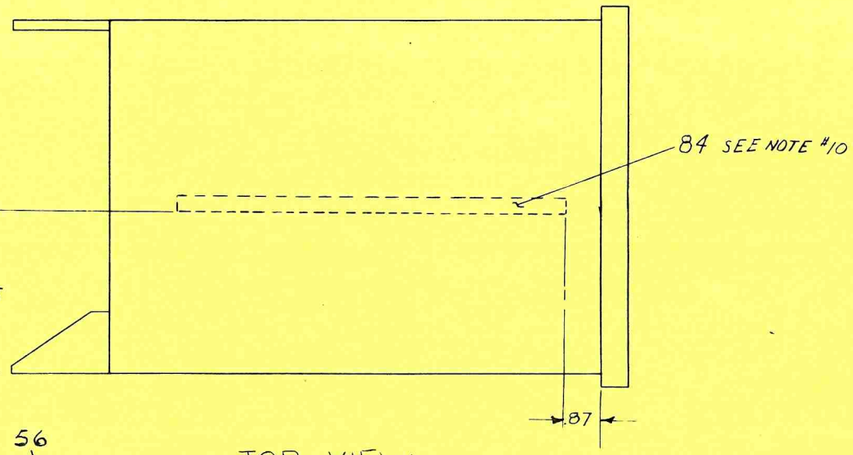
VIEW D-D
SCALE - NONE



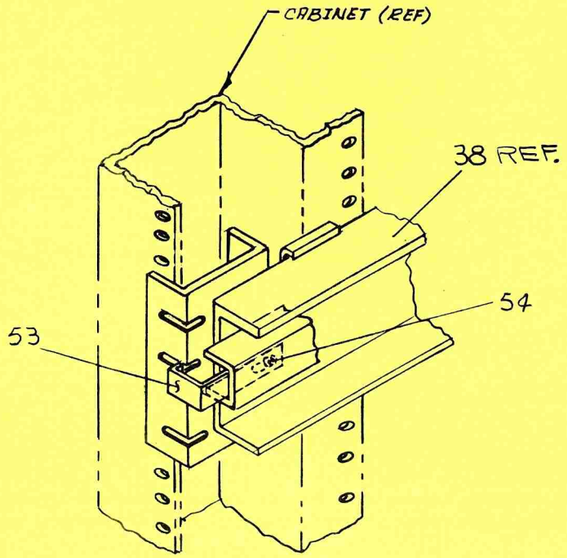
VIEW F-F
SCALE : NONE



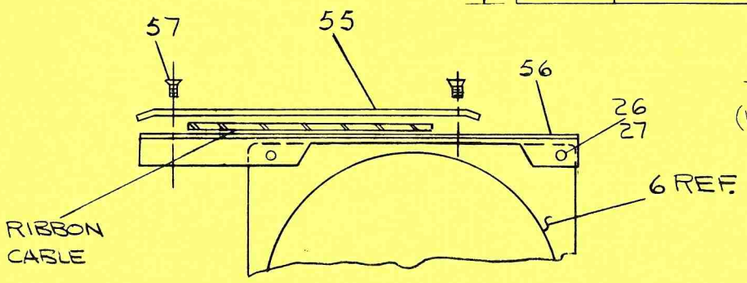
VIEW H-H
SCALE: NONE



TOP VIEW
(WITH TOP COVER)



LOCATION OF SHIPPING BRACKETS WHEN UNIT IS SUPPLIED IN CAB. (BOTH SIDES)



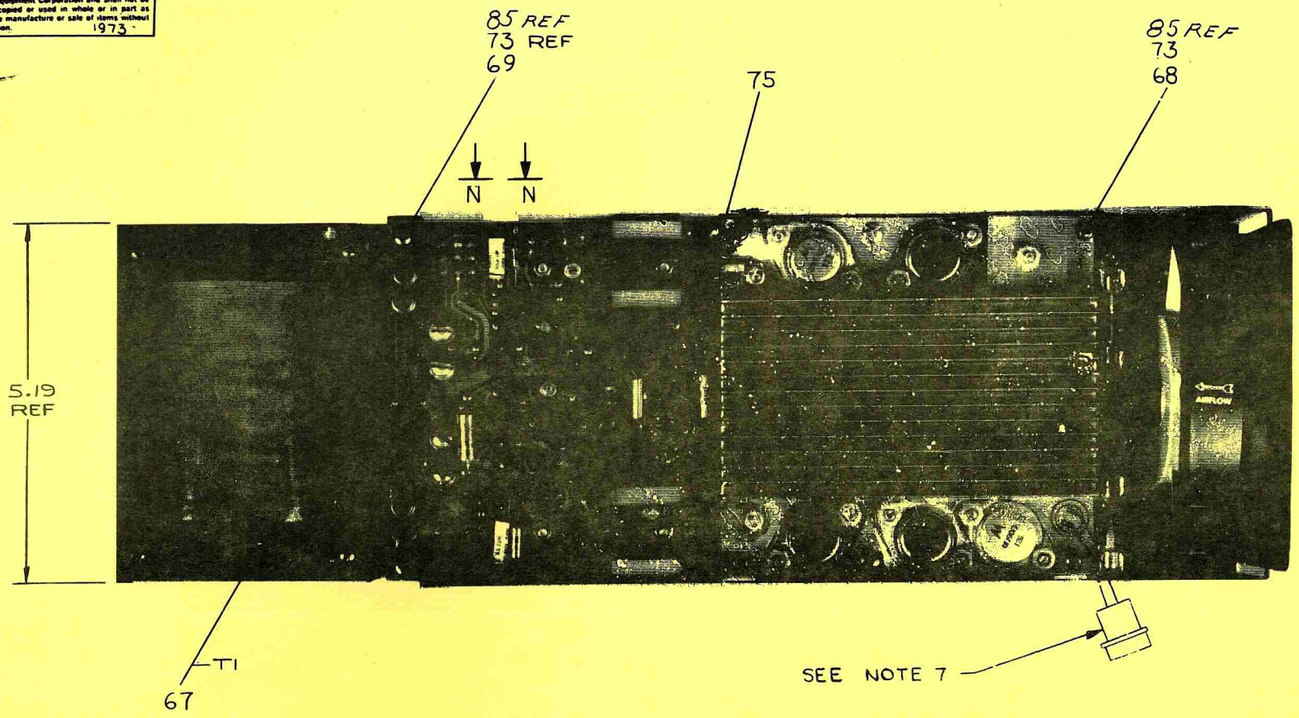
VIEW L-L
SCALE: NONE

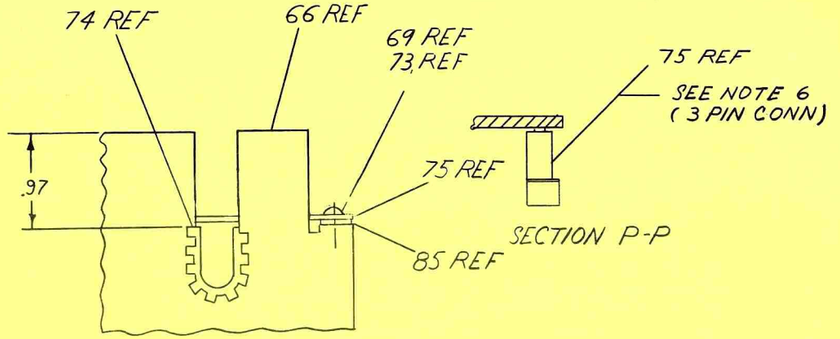
FIRST USED ON OPTION/MODEL: PDP 1105	QTY.	DESCRIPTION: PARTS LIST	PART NO. / ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES: DECIMALS XXX ± .005, .XX ± .02, X ± .1; ANGLES ± 0° 30'		DRN. D. Stickney DATE 3-28-72; CHK'D. C. Teschner DATE 4-14-72; ENG. Allan Lyons DATE 5-15-72; PROJ. ENG'D DATE; PROD. DATE	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓			TITLE: 16 BIT COMPUTER ASSY (PDP 1105)
MATERIAL —		NEXT HIGHER ASSY. B-00-1105-0	SIZE D | CODE UA | NUMBER 1105-0-0 | REV. L
FINISH —		SCALE NONE; SHEET 3 OF 6	DIST.

REVISIONS | REV. | CHANGE NO. | CHK.

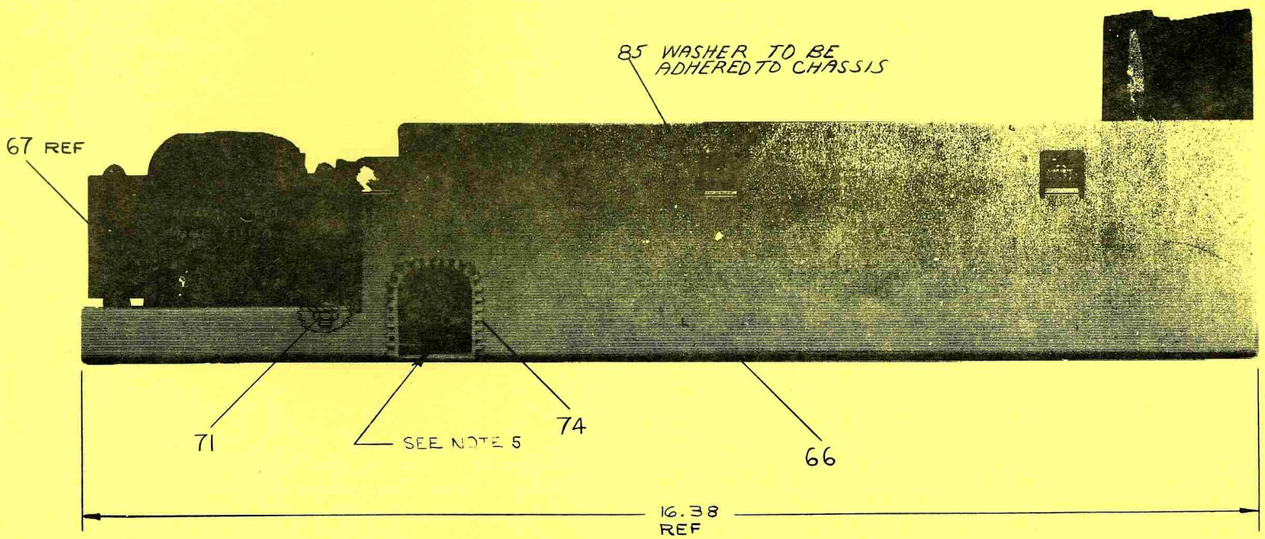
DEC FORM NO. DRD 100-A

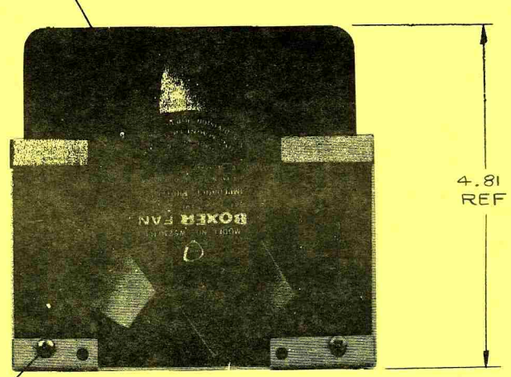
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission. 1973





VIEW N-N





VIEW M-M

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES

DECIMALS: XXX = .005, XX = .02, X = .1 — ANGLES: ±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓

MATERIAL: SEE PARTS LIST

FINISH: —

		DATE
DRN	J. CAHILL	2.24.72
CHK	C. TESCHNER	4-14-72
ENG	A. LYONS	5-15-72
PROJ ENG	B. WEEKS	5-16-72
PROD	R. PETERSON	5-16-72

NEXT HIGHER ASSY: B-DD-1105-0

SCALE: —

SHEET 4 OF 6

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: 16 BIT COMPUTER ASSY (PDP 1105)

SIZE	CODE	NUMBER	REV.
D	UA	1105-0-0	L

DIST.

REVISIONS	CHANGE NO.	CHK	REV.

DEC FORM NO. DRD 100-A

COPYRIGHT © 1973
DIGITAL EQUIPMENT
CORPORATION

WIRE TABLE

ITEM NO.	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONN	TO CONN	TO POINT	TO CONN.	SIGNAL NAME
85	—	—	—	J1	—	—	J1	
	22	ORN	9	—	—			L-C
	18	BLK	7	—	—		TB1-1	GND
	18	RED	8	—	—		TB1-2	+5V
	14	BLK	4	—	—		TB1-3	GND
	22	GRY	5	—	—		TB1-4	+15V
	8	BLU	6	—	—		TB1-5	-15V
	16	VIO	3	—	—		TB1-6	ICLO
	18	YEL	2	—	—		TB1-7	KCLO
85	8	RED	1	—	—		TB1-8	+5V

LEGEND

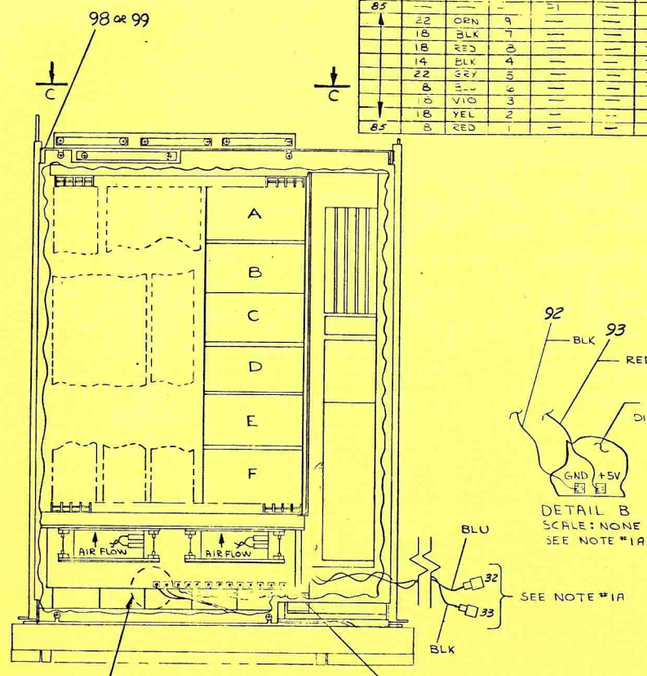
NUMBER	VARIATION
11/05 - NC	115V 60 HZ
11/05 - ND	230V 50 HZ

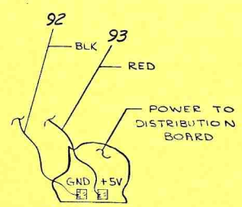
NOTES:

1A. POWER WIRING TO KY11-J CONSOLE (ITEM #3) IS AS FOLLOWS:
POINT NO'S. 32,33 (BLU/BLK TWP) OF POWER TO DISTRIBUTION BOARD HARNESS ARE TO BE CONNECTED TO KY11-J CONSOLE, AS SHOWN IN VIEW E-E.

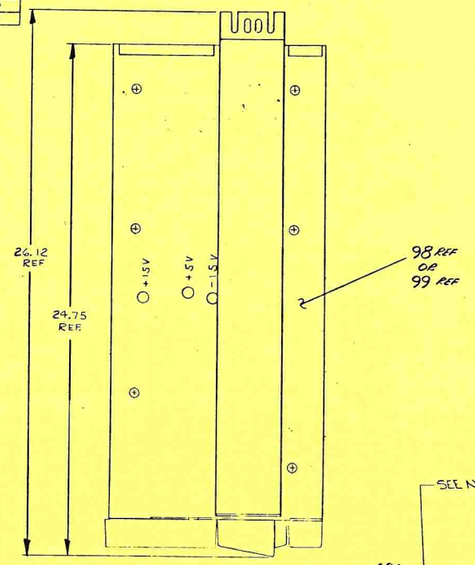
ITEM #92 (BLK WIRE) #93 (RED WIRE) TO BE CONNECTED AS SHOWN IN DETAIL-B ITEM #93 (RED WIRE) GOING TO +5V AND ITEM #92 (BLK WIRE) GOING TO GND, THEN CONNECT LOOSE END OF ITEMS #92 & 93 TO KY11-J AS SHOWN IN VIEW D-D

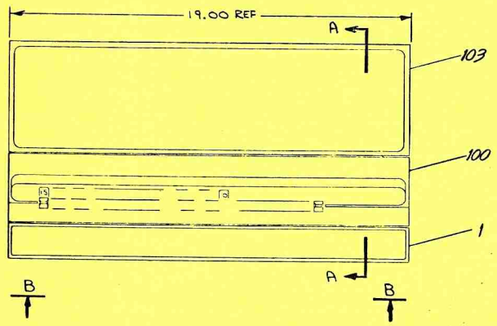
2A. INSTALLATION OF I/O CABLE, WHICH IS ALREADY CONNECTED TO CONSOLE ITEM NO 79, TO BE DRESSED TO FRONT PORTION OF CHASSIS AND ALONG POWER SUPPLY, THEN INTO CHASSIS WHERE CABLE IS CONNECTED TO M7260 BY USING 45° BENDS AND FASTENING WITH TIE WRAP HARDWARE. SEE DETAIL-C

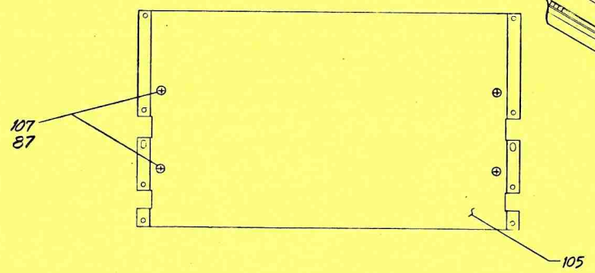




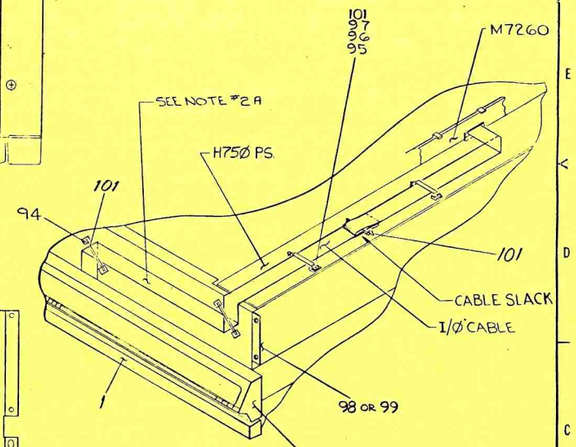
DETAIL B
SCALE: NONE
SEE NOTE #1A







VIEW A-A
ITEM #100, 1 & 107 REMOVED FOR CLARITY OF VIEW



DETAIL-C
WITH ITEM #103 REMOVED

FIRST USED ON OPTION MODEL	QTY	DESCRIPTION	PART NO	ITEM NO
1175		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: XXX = .005, XX = .02, X = .1
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY
MATERIAL
FINISH
NEXT HIGHER ASSY

DRN	J. DANIELS	DATE 2-21-72
SHEP	J. FISCHER	DATE 3-13-72
ENG		DATE
ENG	J. DANIELS	DATE 5-11-72
QA		DATE
MFG		DATE 5-11-72

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: 16 BIT COMPUTER (PDP1105)

B-11-1105-M-0

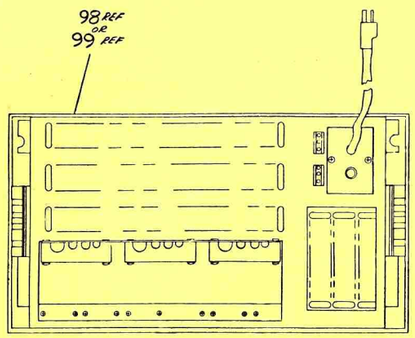
SIZE E | CODE | NUMBER: DUA11/05-0-0 | REV L

SCALE | SHEET | DIST

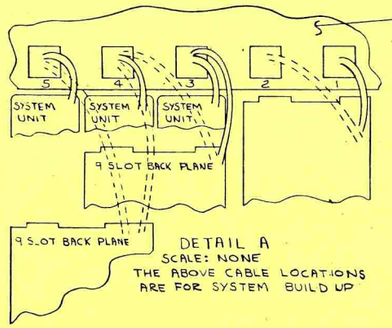
CHANGE NO. | REVISION | REV
ONE

ECO No. 11/05-00047 Sheet 18 of 18

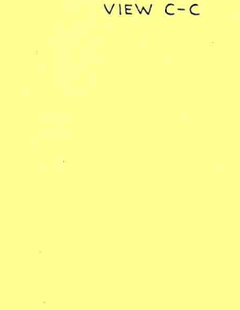
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.
COPYRIGHT © 1973
DIGITAL EQUIPMENT
CORPORATION



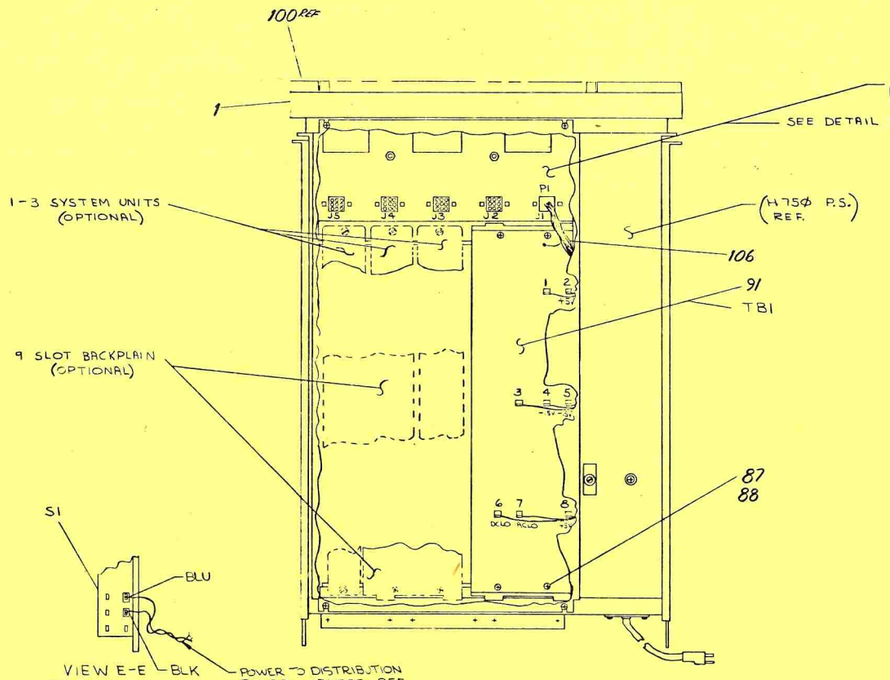
VIEW C-C



DETAIL A
SCALE: NONE
THE ABOVE CABLE LOCATIONS
ARE FOR SYSTEM BUILD UP

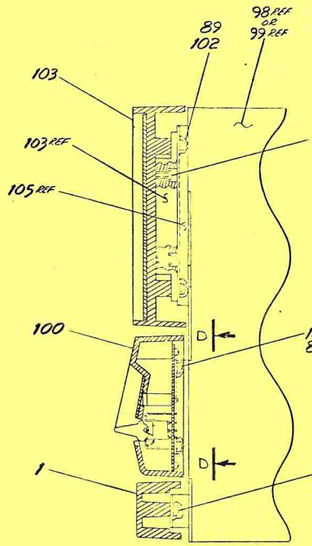


VIEW D-D
SCALE: NONE
SEE NOTE "1A



VIEW E-E
SCALE: NONE
SEE NOTE "1A

VIEW B-B



SECTION A-A
SCALE: NONE

FIRST USED ON OPTION MODEL	QTY	DESCRIPTION	PART NO	ITEM NO
11/25		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES: DECIMALS XXX ± .005, XX ± .02, X ± .1; ANGLES ±0° 30'. REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY ✓. MATERIAL —. FINISH —.

DRN	J CAHILL	DATE 8-21-72
DES/ENGR		DATE 8-14-72
LDR	LYONS	DATE 9-15-72
PROJ MGR	P WEEKS	DATE 9-15-72
E.P.E.	PETERSON	DATE 9-15-72
NEXT HIGHER ASSY	15-UD-11/05-0-0	
SCALE	NONE	
SHEET	6 OF 6	

DIGITAL EQUIPMENT CORPORATION
TITLE: 16 BIT COMPUTER (=DP 1105)
SIZE E | CODE UA | NUMBER 11/05-0-0 | REV L
DIST

REVISIONS	REV	CHANGE NO
	L	

DEC FORM NO. C 1200

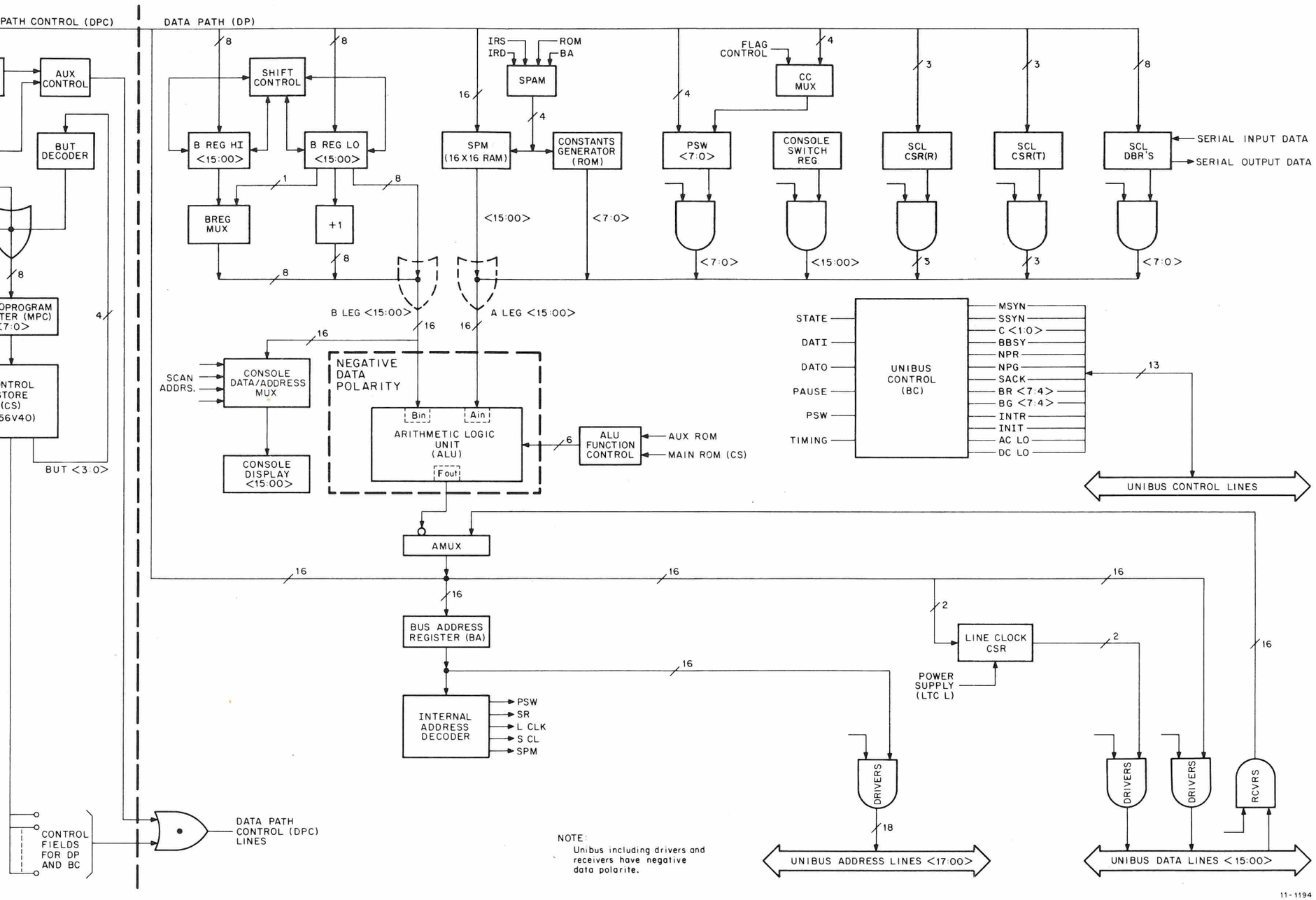


Figure 8-4 KD11-B Detailed Block Diagram